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THE

UNIVERSITY STUDIES

OF THE

UNIVERSITY OF NEBRASKA

VOLUME XVII

Smithsonian Institution
328804
U. S. National Museum

LINCOLN
PUBLISHED BY THE UNIVERSITY
1917

PRESS OF
THE NEW ERA PRINTING COMPANY
LANCASTER, PA.

By Transfer
APR 15 1919

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Vol. XVII January 1917 No. 1

SMITHSONIAN INSTITUTION
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University Studies

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LINCOLN, NEBRASKA

UNIVERSITY STUDIES

VOL. XVII JANUARY 1917 NO. 1

A STUDY OF THE VEGETATION OF SOUTHEASTERN WASHINGTON AND ADJACENT IDAHO

BY J. E. WEAVER

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INTRODUCTION

No one at all botanically inclined can travel through southeastern Washington without being impressed with the marked changes which a distance of only a few miles may show in the vegetation. Traveling eastward from a point fifty miles west of the Idaho state line, one passes from a region of scab-land sagebrush through one of rolling hills covered with bunch-grasses. Upon steadily ascending the great Columbia Plateau, the bunch-grasses give way to well developed prairies, and these in turn, near the Idaho line, to forests of yellow pine, Douglas fir, white fir, tamarack, and cedar. Or starting from Spokane in the central part of eastern Washington and traveling southward, one soon leaves the pine woodland of the Spokane gravels and passes again through the rolling prairies. Projecting above the surrounding sea of prairie-covered basalt are islands of quartzite, the tops of lofty mountains almost buried under the basalt. These may be covered with grass land on the windward side, while at a distance of a few meters over the crest the prairie may give way to rather dense forests. Cut through the layers of basalt, in a mighty canyon, 1,600 feet deep, the Snake River winds its way through the prairie belt. Upon descending into the canyon one finds the bunch-grasses and sagebrush vegetation growing in a climate markedly different from that of the plateau above. Far southward from the canyon of the Snake River rise the pine-covered foothills of the Blue Mountains.

Such is a brief glance at the wonderful field for investigation

offered the ecologist in southeastern Washington. It is a field in which many stages in succession are offered within relatively easy reach of a base station and one in which the vegetation so clearly reveals adjustment to climatic and edaphic conditions that one could scarcely wish for a better place in which to measure the factors of the habitat and the vegetational responses. Moreover, in this great inland province, practically no botanical work except of a taxonomic character has been done (3, 9, 10, 11).

Because of the high fertility of the deep basaltic soils, the prairie region has largely been broken up for the growing of wheat. Indeed, only isolated tracts of the best developed prairies remain intact, while hundreds of acres of the drier bunch-grass lands have been broken up during the time of the progress of this work. It seemed unfortunate that a record of the rapidly disappearing vegetation of this interesting region had not been made. Accordingly, early in the spring of 1912, reconnaissance work was begun, with Pullman, Washington, as the base station.

Ecological work was pursued vigorously in season and out (with the exception of the summer of 1912) until the fall of 1914.

In the course of this investigation I have become indebted to several persons to whom I wish to express my appreciation for their services. I am pleased to express my appreciation first of all to Dr. F. E. Clements, of the University of Minnesota, who visited my field briefly in 1914, for many valuable criticisms and suggestions. Dr. Raymond J. Pool, of the University of Nebraska, has read the first draft of this paper and I am grateful to him for kindly suggestions. Thanks are due to Dr. T. C. Frye, of the University of Washington, for the identification of a number of mosses, and to the late Dr. H. E. Hasse of Santa Monica, California, who was kind enough to identify all of my lichens. Wilting coefficient determinations of soils were made under the direction of Dr. L. J. Briggs, of the United States Department of Agriculture, to whom I wish to express my appreciation. The chemical and physical analyses of soils were made by the departments of chemistry and soils respectively, of the Washington Agricultural Experiment Station at Pullman. I wish further to acknowledge my indebtedness to Mr. Walter L. Muenscher and

Mr. Earle Gibb, my one-time students, the former having assisted me in the field during the entire summer of 1913, and the latter during 1914. Finally, I wish to express my appreciation to Dr. Harry B. Humphrey, now of the Bureau of Plant Industry, and formerly my colleague in the Washington State College, for his kindly interest in the work during the first year of the investigation.

EXTENT AND POSITION OF THE AREA

The area under consideration includes approximately 4,000 square miles of territory located in southeastern Washington and adjacent Idaho. On the south it extends toward the foothills of the Blue Mountains, and reaches northward to the vicinity of Spokane. Its western limit is about 50 miles from the Idaho boundary, while in Idaho it includes a strip about 15 miles in breadth. This area lies in the eastern part of the great Columbia Plateau and extends eastward into the foothills of the Bitterroot Mountains. The 47th parallel of latitude passes through the center of this region, while it is bounded approximately on the east and west by longitude 117° and 118° respectively. Altitudinally, it ascends from about 1,175 feet on its western border to a height of 4,000 feet in the mountains. The lowest point, about 520 feet, is reached in the Snake River Valley, while Cedar Mountain, near the Washington-Idaho line, reaches a height of 4,950 feet. While the above boundaries limit in a general way the investigations recorded in this paper, without doubt the vegetation in adjoining regions is not far different from that here described.

The peculiar topography, together with the range in altitude, gives this area three clearly defined plant formations, ranging from the desert-scrub formation, through the prairie formation to the Pacific Coast forest formation. A brief statement of the geology and topography of the region will help to make clear the reasons for the present distribution of plant communities.

PHYSIOGRAPHIC REGIONS AND GEOLOGY

The part of the state of Washington lying east of the Cascade Mountains is divided naturally into three great physiographic

provinces. The Okanogan Highlands occupy the northeastern part of the state, while the Blue Mountains cover a relatively small area in the southeastern part. The remainder and larger part of the area makes up the Columbia Plateau.

The Okanogan Highlands consist mainly of gently rounded hills rising into peaks 4,900 to 6,600 feet high. Geologically, they are similar to the northern part of the Cascades and are composed largely of granite. They form, with the adjacent mountains of British Columbia, a connecting link between the Cascades and the Rocky Mountain system in Idaho. They are important in connection with these studies mainly for the ameliorating effect they exert upon the climate, and for the rôle they have played in plant distribution in the foothills of the Bitterroot Mountains.

The portion of the Blue Mountains occurring in Washington are composed wholly of basalt, and represent a great uplift of this rock surrounding a central mass of granite peaks. In Washington they reach an elevation of more than 6,500 feet, while in Oregon they rise about 3,300 feet higher.

The Columbia Plateau is thus bounded in Washington on three sides by high mountain ranges, while in Idaho, on the east, it merges into the Bitterroot Mountains. The plateau forms the greater portion of eastern Washington, and is made up of an immense mass of basalt, known geologically as the Columbia River basalt. This basalt is the result of a series of lava overflows which involved not only Washington, but also large areas in Oregon and Idaho, and even northern California. In Washington it covered all of the region south of the Okanogan Highlands and extended westward from the Bitterroot Mountains to the Cascades. These basaltic lavas were extruded in a highly fluid condition from numerous vents thickly strewn over the floor of the region, and were spread over the surface in great flows (1, 12, 13, 14). The apparently flat basaltic plains stand out in sharp contrast to the mountain borders. The floor upon which the lava was extruded had considerable relief and was not greatly unlike the present Okanogan Highlands, with canyons, gorges, and mountain peaks; the whole showing a state of vigorous dissection (14). The effect of the basaltic inundations was to fill

the valleys, and, to a large extent, bury the old topography. An average thickness of at least 4,200 feet has been estimated for the Columbia basalt in Washington. For the most part, the Columbia River lava completely covered all of the older rocks over which it flowed. Exceptions to this appear in peaks which were too high to be overwhelmed, such as Kamiak Mountain and Steptoe Butte in eastern Washington. Likewise, old divides extend into the basaltic fields as capes or promontories against which the lava came to rest. These older rocks, like those of the foothills of the Bitterroot Mountains, are mainly granites, gneisses, schists, and quartzites. Canyon walls, notably those of Snake River, not only reveal the older rock, but also expose the successive lava flows with their beds of dust and lake deposits. Snake River has cut down to a distance of over 1,600 feet and has uncovered in places the tops of buried mountains. Its canyon shows at least ten overflows of the lava. Between some of these overflows sufficient time elapsed for soil to form and forests to grow. The evidences of the latter appear either as charcoal or as silicified tree trunks. Geological investigations indicate that the great outpourings of lava were antecedent to the main uplift of the Cascade Mountains. The appearance of these mountains so effectually modified the climate by cutting off the cool, moist, southwest winds as to make much of the region eastward quite too arid for forest growth.

SOILS

The basalt, although hard and resistant to forces which abrade it, yields with comparative rapidity to agencies which tend to disintegration and decay. The weathered basalt has decomposed to form a rich residual soil which mantles the surface and gives its slopes characteristically soft, rounded, flowing outlines. It consists of a friable, dark-brown silt loam, with a depth ranging from a few inches to several feet. The subsoil consists of a light-brown silt loam. It is heavier and more compact and plastic than the surface soil. Both soil and subsoil are extremely retentive of moisture. They form a mantle usually many feet deep, and only along the canyons of streams, or in the scab-rock

in the western part of the area, is the basalt exposed. Westward the soil becomes lighter in color, and in some cases is impregnated with alkali.

Calkins (1) has advanced the theory that the soils in many parts of eastern Washington have been formed by wind action and are not of a residual nature. His conclusion is based upon the facts that in many parts of southeastern Washington there is an absence of lamination in the soil, that it is extremely fine in texture, that there is a remarkably sharp definition between the soil and basalt, and that comparative chemical analyses indicate soils not of the character naturally to be expected from the decomposition of basalt in this climatic province. He believes the principal source of the material was from the soft sedimentary beds in the southwestern portion of the Columbia Plateau. However, the fact that there are no enclosed and undrained basins, as there must be had wind been the only agent at work, leads one to conclude that water erosion has also been an important factor in forming the present topography.

By the action of water, and especially the prevailing southwest wind, the plateau has been moulded into rounded hills not unlike sand dunes. The soils are constantly shifting from south and southwest to north and northeast slopes. This gives better weathering conditions on the exposed hillsides, while the soils are deepest on the brows of the slopes where there is the most favorable opportunity for the accumulation of wind-blown material.

As is characteristic of dry regions, the transition from soil to subsoil is not well marked, although the lighter-colored subsoil appears nearer the surface on exposed than on sheltered slopes. The proportion of clay is greatest towards the tops of the hills. Humus increases as one goes down the slopes and is highest in the valleys, where it forms a rich, black loam.

In contrast to the silt loam, grit-free soils covering the basalt, are the sandy loam soils formed from the disintegration of quartzite, granite, gneisses, and schists of the buttes and mountains. These vary so widely in mechanical composition, water holding capacity,

and wilting coefficient, that they are considered in connection with the plant communities which they support.

TOPOGRAPHY AND DRAINAGE

Viewed from the top of a bordering mountain, or, better, from the summit of an isolated butte, the surrounding plateau looks

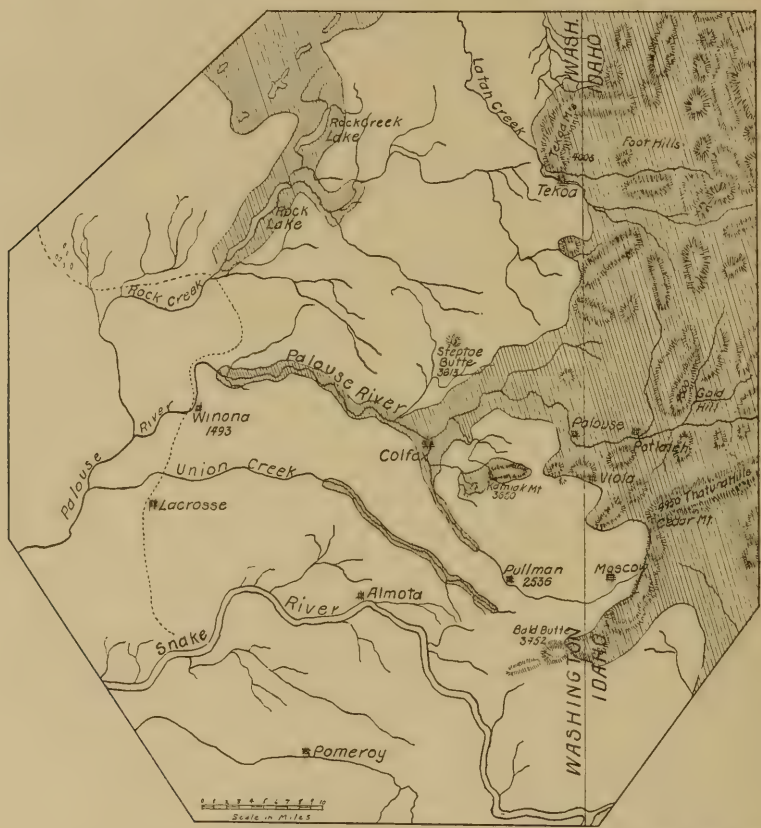


FIG. 1. Map of southeastern Washington and adjacent Idaho. The shaded areas indicate coniferous woodland. Most of the outlying timbered areas are characterized by yellow pine. West of the dotted line and in the canyon of Snake River much of the area is characterized by scab-land covered with sagebrush or bunch-grass.

not unlike the billowy surface of the ocean. The fine silt loam soil, from the disintegrated basalt, has been moulded by the action of wind and water into a dune-like topography (Fig. 38). Because of the constant shifting of the soils from the exposed south and southwest to the leeward slopes, the latter are much steeper. These hills reach a height of 100 to 360 feet. Measurements of a large number of slopes near the base station gave an average gradient of 12° on the exposed sides, while the sheltered sides were from 5° to 8° steeper. Indeed, in parts of the region, many of the hillsides are so steep that they can not be brought under cultivation. The intervening valleys are usually narrow, but never form undrained basins. The general slope of the region is westward. While Thatuna Hills, a low, outlying spur of the Bitterroot Mountains, culminate in Cedar Mountain, 4,950 feet high, the eastern edge of the lava sheet reaches an altitude of only 2,750 feet (Fig. 1). It descends at the rate of about 30 feet per mile, to 1,170 feet on the western border of the region under consideration.

Two main rivers with their tributaries drain the region except the northeastern part which is drained by tributaries of Spokane River. The Palouse River has its headwater tributaries in the mountains of Idaho, and after passing into Washington the north and south forks unite at Colfax. In the western part of the region it turns southwestward and finally enters the Snake River. At Colfax the river has cut a canyon into the basalt to a depth of 300 feet.

In general, the river canyons, whether large or small, are characterized by much steeper south and southwest than north and northeast banks. This is due in part to greater exposure of the north and northeast sides to temperature changes, and to wind action which erodes and carries away the soil materials, and in part to the constant covering of the sheltered sides by wind-blown material. These processes have a striking effect upon the vegetational cover. Locally the exposed canyon walls are known as rim-rock.

Snake River is joined by the Clearwater as it enters Washington. Tributaries of the latter drain the extreme eastern part of

the region. Snake River flows westward through the region in a canyon which is simply an immense gorge a mile and a half to two miles wide hewn in the basalt. Although the canyon is over 1,600 feet deep, the river has not yet, except in a very few places, cut to the bottom of the basalt, for its present bed is still like its bluffs. The soil of these bluffs, as is characteristic of similarly exposed situations in the region, presents various stages of decomposition from the coarse talus at the foot of the cliff to well formed soil. The canyon at its bottom is scarcely wider than the river, except at the bends, where bars of moderate area have been formed. The soil of the bars is partially river-sand of granitic origin and partially wash from the bluffs.

Except for the Clearwater, no large streams enter Snake River in this region. Numerous small laterals have worked their way back into the basalt, and it is along these that the main canyon may be entered, especially from the south.

In general, the topography is young. The streams have not advanced far in their task of cutting away the rocks from the plateau and of reducing the land to base level. Especially south of Snake River, in Garfield County, where the surface is less rolling, one is impressed with the view of a land with a broad plateau surface and an infantile drainage. Here the spaces between the streams are flat-topped.

In the northwestern part of the area occur numerous small lakes, of which Rock Lake, about 0.5 mile wide and 7 miles long, is the largest. It is really a great crack in the basalt, with rocky canyon walls and basalt bottom. It connects northward with Little Rock Lake and is drained into the Palouse River by Rock Creek.

About these lakes, as well as along the canyons of the streams, the weathering of the edge of the basaltic sheets has caused them to recede unequally and to form steps or terraces in the faces of the precipices. Where the walls are steepest, they present a series of narrow steps covered with talus and soils in all stages of formation, separating vertical masses of bare and frequently columnar rock 30 or more feet in height (Fig. 45).

In the drier western part of the region, where the disintegra-

tion of the basalt is correspondingly of a smaller degree, the rock often crops out upon the surface. Such rocky lands are known locally as scab-lands. They often occupy what appear to be former river valleys, although they are now dry or contain only small streams or small groups of lakes. These valleys may be of considerable extent; the local names, "Eight-mile Flat," "Twelve-mile Flat," etc., indicate their size.

Owing to the porous nature of the basalt, as well as to sheets of clay, sand, and gravel interspersed between the successive layers, springs are numerous throughout the region. Oftentimes, wells dug merely into the soil afford a good supply of water, although they are usually drilled into the basalt (8). In other cases, as at Pullman, an abundant supply of fine artesian water is obtained from beds of sand and gravel between the layers of basalt.

Standing above the surrounding plateau are numerous isolated buttes and several ranges of low mountains. These are the tops of lofty mountains not overwhelmed by the flood of basalt. Among the former, Steptoe Butte, a perfectly conical peak with an altitude of 3,613 feet, is a landmark to be seen for miles. Likewise, Kamiak Mountain, running from east to west for a distance of over two miles, and reaching an altitude somewhat greater than Steptoe Butte, is equally prominent. In some cases, only a few acres of the tops of buried mountains show themselves above the basalt. Such a butte may be seen just west of Bald Butte, the culmination of a ridge of quartzite running out southwestward from Thatuna Hills. Tekoa Mountains, near Tekoa, Washington, are a low, outlying ridge of the Bitterroot system. They reach a height of 4,000 feet. Gold Hill, not far from Potlatch, Idaho, is the highest point (about 4,500 feet) of another group, while Cedar Mountain (4,950 feet), northwest of the Clearwater River in Idaho, is the highest point of a considerable range known as Thatuna Hills. These buttes and mountains are very old geologically as compared with the basalt, and are well eroded and mostly forest-covered. Southeastward their streams empty into the Clearwater River. Elsewhere they are

drained by the Palouse River and in the extreme northeast by tributaries of Spokane River (Fig. 1).

GENERAL PLANT-LIFE CONDITIONS

Hemmed in on all sides by mountains the region under consideration has a climate much warmer and much drier than one would expect at this altitude and latitude. The Okanogan Highlands on the north shelter it from cold winter winds, while on the east and south it is protected by the Bitterroot Mountain system and the Blue Mountains, respectively. The Cascades on the west intercept the rain-bearing westerly winds from the Pacific Ocean. Even where the prevailing southwest wind cutting through the mountain gap of the Columbia River and rising over the high plateau drops much of its moisture near the high eastern border, the annual precipitation is only 21.6 inches. Westward it decreases steadily with decreased elevation, giving an annual precipitation of only 10–13 inches near the western boundary of the region.

In this semi-arid region where evaporation rates are very high, a knowledge of the distribution of rainfall and humidity is very important, for it is well known that scanty rainfall throughout the year, or relative dryness of the air and soil during the growing season, favors a sparse vegetation and the development of xerophytic forms. Since vegetation is not only an expression of present conditions, but to a greater extent a record of conditions that have obtained during a period of years, and since the record is not likely to be altered by a year or two in which conditions may depart from the normal, a study of the precipitation in Fig. 2 is instructive. This gives the mean monthly precipitation at Pullman, covering a period of twenty-four years, and is very representative of conditions in the high prairies. It may be seen at a glance that over two thirds of the precipitation occurs during the non-growing season, and that the light showers of July and August seldom have much influence upon the water content of the soil.

In order that the reader may realize the striking difference be-

tween the distribution of rainfall of this region and that of the Great Plains east of the Rocky Mountains, Fig. 2 also includes the average monthly rainfall at North Platte, Nebraska. It also gives the precipitation at La Crosse, a station in the western part of the region.

However, it is not the absolute rainfall figures alone which furnish a criterion of climate, for the maximum duration of the

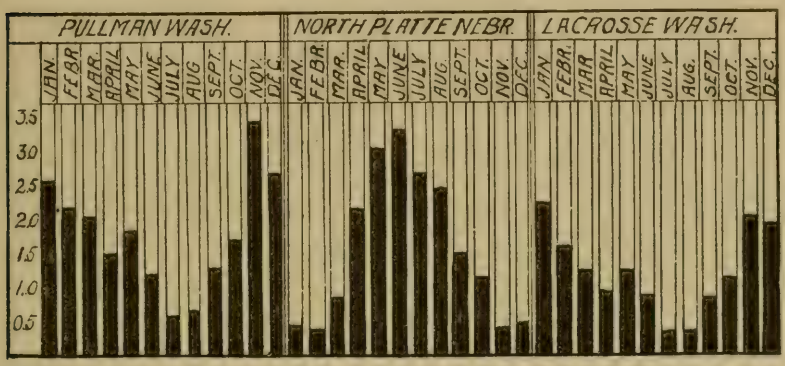


FIG. 2. Mean monthly precipitation in inches at Pullman and La Crosse, Washington, and North Platte, Nebraska.

drought period constitutes a limiting factor of the greatest importance.

During the dry summer months the sky is usually cloudless. At the base station the number of clear days during the growing season (April–October) was 68 per cent. for the years 1914 and 1915. Bright, warm days are followed by cool nights. In fact, a notable feature of the temperature of the region is the great variation between day and night temperatures, especially in summer, when a variation of 20° to 40° F. is not unusual. These cool nights naturally indicate rather late frosts in spring, and early ones in autumn. On the plateau, killing frosts not infrequently occur as late as the middle of May, and, of course, much later in the mountains. In the fall they may occur as early as the middle of September, although light frosts sometimes occur in August. The winters are mild and the prairie soils seldom

freeze deeper than 4–6 inches. The snowfall normally is about 46 inches. The mean monthly and annual temperatures at the base station are given in Table I. It is interesting to note that the mean annual isotherms are approximately the same as those of eastern Nebraska. These are 52° F. to 47° F. These figures do not include the canyon of the Snake River, which has a distinctly warmer and drier climate.

TABLE I

TEMPERATURES AT PULLMAN, WASHINGTON

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Mean daily maximum	35	36	47	56	63	72	83	83	70	56	42	35	56
Mean daily minimum	22	24	31	37	43	50	55	54	46	38	31	24	38
Mean	29	32	38	47	53	59	67	66	58	49	38	32	47

Since it is not the mean temperature of a region but rather the extremes that exert the most profound effect upon plants, Table I also includes the mean daily minimum and mean daily maximum temperatures.

Another important climatic factor is the wind. It is prevailingly from the southwest. Just as it has had such a profound effect upon moulding the topography of the region, likewise it has a marked effect upon the vegetation. Sweeping across the many miles of open prairie and desert of northern Oregon and south-central Washington, and not infrequently attaining a velocity of 30–50 miles per hour, it has a marked effect upon the evaporating power of the air. By increasing the latter, it increases the saturation deficit and consequently accelerates transpiration. During the growing seasons of 1913–1914, the wind blew from the southwest, or some southerly or westerly direction over 60 per cent. of the time. The southwest winds often assume the form of dust storms in summer. For days the air may be so filled with dust that the sun is scarcely visible. Such storms may become serious enough to cause much destruction.

Because of the deficient rainfall and the low humidity through-

out the region, the vegetational distribution is markedly influenced by the edaphic and topographic conditions. The influence of rainfall upon the distributional and seasonal activities of plants is obviously exerted chiefly through its power to replenish soil moisture. While rainfall is only indirect in its relation to plants, soil moisture is direct. The retention of moisture by soil depends not only upon the kind of soil, but also upon the slope and exposure. These regional differences in precipitation, together with topography and soil depth, delimit in a more or less definite manner the plant communities.

It may make the situation somewhat clearer if, before taking up a detailed discussion of the structure and development of each vegetational unit, a brief survey of the chief plant groups in the succession is given.

GENERAL VEGETATIONAL DISTRIBUTION

The *Festuca* consociation of the *Agropyron-Festuca* association occupies the extreme eastern rim of the basaltic plateau, including the lower buttes and the exposed southwest slopes of some of the higher buttes and mountains (Figs. 21 and 22). This community extends from the yellow pine consocies of the Spokane gravels southward beyond Snake River. It occupies the part of the plateau having the deepest soils and the highest rainfall. Eastward it reaches to Tekoa Mountains, Thatuna Hills, and other outlying spurs of the Bitterroot system. The breadth of this belt is variable, depending upon the precipitation and soil moisture. Perhaps at no point does it exceed 40 miles. Westward and southward it merges into the *Agropyron* consociation (Figs. 19 and 20).

In the *Festuca* consociation, besides the blue bunch-grass (*Festuca ovina ingrata*) and *Balsamorhiza sagittata, Agropyron spicatum* (including variety *inerme*) is the most important component of the plant cover. In marked contrast to its bunch habit in the consociation bearing its name, in the more mesophytic *Festuca* community it is often a sod former. Other important grasses are *Koeleria cristata* and *Poa sandbergii,* while numerous composites, legumes, and other herbaceous species are abundant. Many of

these do not occur in the *Agropyron* community, while indeed several species are confined to the moist north hillsides occupied by this consociation.

At lower altitudes westward and southward the well developed prairie gradually merges into the *Agropyron* consociation. Likewise, on the rim-rock along the canyons of streams as well as on dry mountain slopes this community is well represented. It is characterized by the definite bunch habit of its chief species *Agropyron spicatum.* These bunches are often more than 8 inches in diameter, and may reach a height of over 3 feet. In addition to the absence of numerous characteristically high-prairie species, and the more open nature of the plant cover, the *Agropyron* consociation is further characterized by the coming in of certain plants of a more xerophytic stamp. Most conspicuous among these are the rabbit brush, *Chrysothamnus nauseosus* (including var. *graveolens*), *C. viscidiflorus,* and several species of *Eriogonum.* The bunch-grass not only occupies the deeper soils of the drier region, but is represented in the scab-lands and on the rim-rock where the soils, only a few inches deep, overlie deeply fissured basalt.

On the unbroken rock, covered with only an inch or two of soil, *Agropyron* gives way to the *Poa-Polygonum* associes, a still earlier stage in development (Fig. 18). This latter associes is well represented on the rim-rock throughout the region, as well as over large areas of the scab-lands westward. The June grass, *Poa sandbergii, Polygonum majus,* and *Plantago purshii,* are the most important species. The knotgrass and plantain play the rôle of grasses ecologically. This associes is preceded in the succession by communities of mosses and lichens (Fig. 17).

In the driest part of the region, in the scab-land, where the basalt is almost free from soil, occurs the extreme eastward extension of the desert scrub formation. It is represented by the *Artemisia-Atriplex* association of which *Artemisia rigida,* the scab-land sage of the *Artemisia* consociation, is the characteristic species (Fig. 16). In the deeper soils impregnated with alkali the greasewood consocies, dominated by *Sarcobatus vermiculatus,* occurs.

On the more mesophytic slopes of the treeless hills of the well developed prairie a poorly developed shrub associes occurs. This is made up of *Symphoricarpos racemosus, Rosa nutkana, R. pisocarpa,* dwarfed specimens of *Prunus demissa, Crataegus brevispina, Amelanchier* spp., and sometimes *Opulaster pauciflorus,* and small trees of *Populus tremuloides.* These shrubs are better developed in the canyons and are usually forerunners (especially *Opulaster pauciflorus*) of the yellow pine; along the stream margins they give way to the flood-plain forests of *Populus, Crataegus, Amelanchier, Salix,* and *Alnus* (Fig. 35).

On the outlying buttes as well as in the mountains, the *Opulaster* consocies often occupies considerable areas between the pines and the grass land (Fig. 23). It almost invariably occurs on the sheltered sides of lower buttes and mountain ridges, while its presence as a half-dead relict under the pioneer forest indicates its former possession of numerous other situations.

The *Prunus* consocies is less abundant than the preceding, but it is well represented in dry situations on butte and mountain sides. Like *Opulaster,* it is replaced by the pines in the normal succession. The chief species is the shrub-like tree, *Prunus emarginata.*

On the higher mountains especially, the *Ceanothus* consocies plays a rôle similar to the other shrubs of this associes. The two species *C. velutinus* and *C. sanguineus,* of which the former is the more important, act as forerunners for the yellow pine and Douglas fir.

The *Pinus* consocies is represented by the western yellow pine, *Pinus ponderosa,* the most xerophytic forest tree in the region. This consocies not only occupies dry slopes and ridges on the buttes and mountains, but has worked down along the Palouse River canyons as well as along Rock Lake and Rock Creek and Union Flat, to an altitude of only 1,500 feet (Figs. 1, 24, and 45). Everywhere the pine is the pioneer forest tree, and forms a fringing belt along the prairie. While it is usually preceded by some shrub consocies, yet it is able to invade the prairies, and especially those with a more sandy soil, without such an intervening stage.

The *Pseudotsuga* consocies, when pure, occupies dry, rocky

slopes of the higher mountains, such as Gold Hill and Cedar Mountain. More usually Douglas fir is mixed with yellow pine, it being only slightly less xerophytic than the latter. Such mixtures of pine and Douglas fir frequently occupy large areas, the dominance of the latter indicating more mesophytic conditions (Fig. 25).

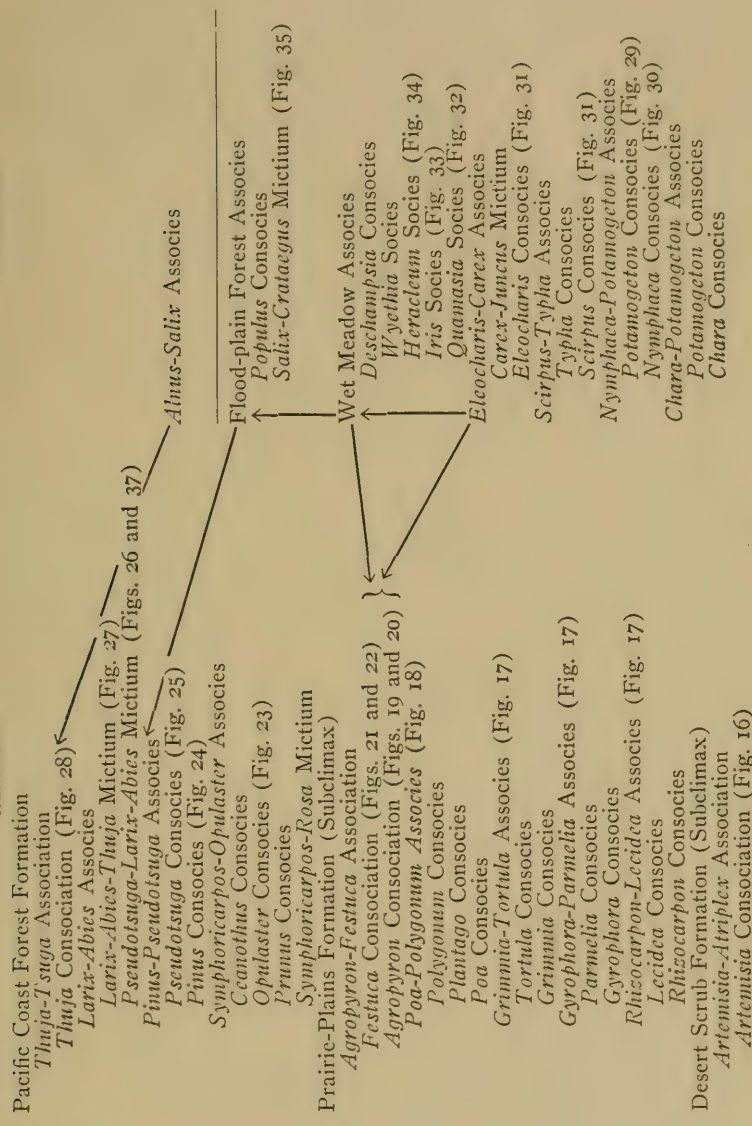
The *Larix-Abies* associes forms the chief forests of the region. The western larch, *Larix occidentalis,* being more xerophytic than the white fir, *Abies grandis,* is usually the first tree to appear in the *Pseudotsuga* consocies. Mixed forests of Douglas fir and larch are not infrequent. These often show relict pines and invading white firs. Such exposed situations as Kamiak Mountain and Tekoa Mountains are especially representative (Figs. 37 and 46).

Likewise, large areas of sheltered mountain slopes are characterized by *Larix* and *Abies* in nearly equal abundance, with a considerable admixture of Douglas fir on the drier slopes and the appearance of cedar, *Thuja plicata,* in the moist ravines (Figs. 26 and 27). Finally, in the deep ravines and most sheltered situations, the giant cedar, representing the climax community of the region, appears. Often it forms pure stands over local areas, the low light intensity excluding other trees (Fig. 28). But more frequently it forms a mictium with the white fir and larch, *Abies* being the last to drop out.

Each stage in forest succession is characterized by its particular group of shrubs and herbaceous vegetation. The story of succession from one stage to the next is largely a story of increasing water content and of decreasing light.

Perhaps this brief survey, together with a glance at the map (Fig. 1), will enable the reader to grasp the general vegetational regions. Following is an outline of the units of vegetation and their subdivisions in the order of their development.

The developmental basis for the analysis of vegetation as set forth by Clements (2) is adopted here. Such a basis includes physiognomy, floristics, and habitat. For those who are not familiar with this basis of classification a few words of explanation may not be amiss.


XEROSERE
HYDROSERE
Pacific Coast Forest Formation
Thuja-Tsuga Association
Thuja Consociation (Fig. 28)
Larix-Abies Associes
Larix-Abies-Thuja Mictium (Fig. 27)
Pseudotsuga-Larix-Abies Mictium (Figs. 26 and 37)
Pinus-Pseudotsuga Associes
Pseudotsuga Consocies (Fig. 25)
Pinus Consocies (Fig. 24)
Symphoricarpos-Opulaster Associes
Ceanothus Consocies
Opulaster Consocies (Fig. 23)
Prunus Consocies
Symphoricarpos-Rosa Mictium
Prairie-Plains Formation (Subclimax)
Agropyron-Festuca Association
Festuca Consociation (Figs. 21 and 22)
Agropyron Consociation (Figs. 19 and 20)
Poa-Polygonum Associes (Fig. 18)
Polygonum Consocies
Plantago Consocies
Poa Consocies
Grimmia-Tortula Associes (Fig. 17)
Tortula Consocies
Grimmia Consocies
Gyrophora-Parmelia Associes (Fig. 17)
Parmelia Consocies
Gyrophora Consocies
Rhizocarpon-Lecidea Associes (Fig. 17)
Lecidea Consocies
Rhizocarpon Consocies
Desert Scrub Formation (Subclimax)
Artemisia-Atriplex Association
Artemisia Consociation (Fig. 16)
Alnus-Salix Associes
Flood-plain Forest Associes
Populus Consocies
Salix-Crataegus Mictium (Fig. 35)
Wet Meadow Associes
Deschampsia Consocies
Wyethia Socies
Heracleum Socies (Fig. 34)
Iris Socies (Fig. 33)
Quamasia Socies (Fig. 32)
Eleocharis-Carex Associes
Carex-Juncus Mictium
Eleocharis Consocies (Fig. 31)
Scirpus-Typha Associes
Typha Consocies
Scirpus Consocies (Fig. 31)
Nymphaea-Potamogeton Associes
Potamogeton Consocies (Fig. 29)
Nymphaea Consocies (Fig. 30)
Chara-Potamogeton Associes
Potamogeton Consocies
Chara Consocies

The formation is the unit of vegetation. It is the climax community of a natural area in which the essential climatic relations are similar or identical. It is an organic entity, covering a definite area marked by a climatic climax. It consists of associations which are actual parts of the area with distinct spatial relations.

The term association is restricted to those climax communities which are associated regionally to constitute the formation. Associations agree with their formations in physiognomy and development and are recognized chiefly by floristic differences.

The consociation is the unit of the association. It is characterized by a single dominant. While the association is actually a grouping, the consociation is pure dominance. In the usual treatment, most consociations appear as associations.

A society is a community characterized by one or more subdominants, that is by a species dominant over portions of an area already marked by the dominance of consociation or association. It is a localized or recurrent dominance within a dominance.

The above units of vegetation are essentially climax. The following are developmental. To ecologists who regard the formation as an actual organism, it is essential to distinguish developmental and climax communities.

The associes is the developmental equivalent of the association. It is composed of two or more consocies, *i. e.,* developmental consociations, just as the association consists of two or more consociations. Like the association, it is based upon life-form, floristic composition, and habitat, but differs from it in as much as all of these are undergoing constant or recurrent developmental changes. While the association is permanent, in so far as development is concerned, the associes is transient although it may persist for many years.

A consocies is a developmental community marked by the striking or complete dominance of one species belonging to the life-form typical of that stage of development. It differs from the consociation only in that it is a developmental or seral, while the latter is a climax community.

A socies is a seral society characteristic of a developmental

community instead of a climax one. Like the society it is a case of subdominance within a dominance.

The following table shows the relation of climax and seral or development units to the formation, as well as the relation of the units of each series to each other and the correspondence of units in each series.

FORMATION

Climax Units:	*Seral Units:*
Association	Associes
Consociation	Consocies
Society	Socies

EVAPORATION AND SOIL MOISTURE IN RELATION TO SUCCESSION

Without question, the water relations of the habitat are the most important cause of succession. This is especially true of grass land communities, and even in forests where light is a controlling factor, it is well known that the water relation has a marked effect upon the tolerance of forest trees. As Fuller (4, 5) has pointed out, in a study of water conditions, two phases of the subject are of importance.

> They are the direct source and amount of the supply and the region and cause of the loss. The latter is a climatic, the former largely an edaphic problem, for it is evident that plants derive their moisture from the soil and lose it into the air, and for the quantitative solution of these problems it is necessary to measure the power of the air to extract water from the plant; in other words, the evaporating power of the air, and the amount of moisture in the soil available for the use of plants.

Fuller (4, 5) and others have pointed out that the evaporation rates in the lower aërial stratum and the range of water content in the upper subterranean stratum are the most critical ones.

> Within this (aërial) stratum develop all the seedlings, and upon their death or survival depends the character of the succeeding vegetation. Therefore, if the vegetation of an association so affects the evaporation rate of this stratum that it permits the survival of seedlings of more mesophytic species, it is evident that a more mesophytic association will develop, and succession will be accomplished.

Measurements of the water content of the soil and the evap-

orating power of the air have been carried on in the various plant communities and a relation has been established between the moisture conditions and plant succession.

Livingston's standardized porous cup atmometers were used to determine the rate of the evaporating power of the air. They were always placed with the evaporating surfaces 17–23 centimeters above the surface of the soil, care being taken in all cases to select spots which possessed the average amount of herbaceous, shrubby, or tree vegetation characteristic of the community as a whole. These cups were almost invariably run in duplicate, sometimes in triplicate; they were frequently checked and restandardized, and the readings reduced to those of the standard atmometer. In the following graphs, the ordinates give the average daily evaporation during the intervals indicated by the abscissas. A preliminary report giving a detailed statement of a part of these results has already been published (16).

Soil moisture determinations were made at the same stations and at the same time that evaporation readings were taken. In making the determinations, samples of 100–150 grams were invariably taken in duplicate and from separate holes about 3 feet apart. These samples consisted of a core of soil to a depth of 10 inches. They were dried in an oven at a temperature of 100–105° C. and the water content calculated in percentages on the basis of the dry weight.

In the following figures, the results are represented graphically, the wilting coefficients being shown by lines of the same type as the line showing the range of soil moisture for a particular community. The ordinates represent the percentages of soil moisture and the abscissas indicate the intervals between readings. The intervals between the graphs and the lines denoting the wilting coefficients (if these exist above the latter) give the amount of available water.

During the summer of 1913 a group of stations were established near Colfax, Washington. Here the south fork of the Palouse River has cut a canyon in the basalt to a depth of 300 feet. Along the north bank of this canyon the *Agropyron* consociation is well developed. The sheltered south bank is covered

with a consocies of yellow pine, above which, and still on the north slope, the *Festuca* consociation continues. The atmometers in the *Agropyron* community were installed about half way up the bank of the canyon. Those in the pines were placed in a

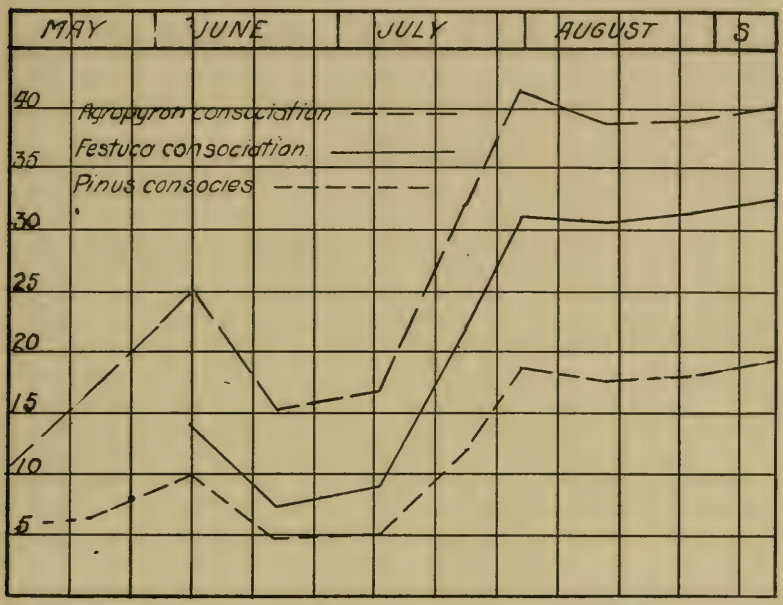


FIG. 3. Evaporation rates in the *Agropyron, Festuca,* and *Pinus* communities at Colfax, Washington.

similar position on the opposite bank, and about 60 feet beyond these a station was established in the *Festuca* consociation. Graphs of the data from these instruments have been plotted in Fig. 3.

These graphs show a striking decrease in the evaporating power of the air as the progressive stages of vegetational development are approached. During 1912 preliminary measurements indicated just such conditions in these communities. Stations maintained at Pullman during 1913, showed similar differences in evaporation between the *Agropyron* and *Festuca* consociations, while during 1914 further data at Colfax confirmed in general the above results.

Fig. 4 shows the comparative average daily evaporation rates during 1913 in the three communities, respectively. These data

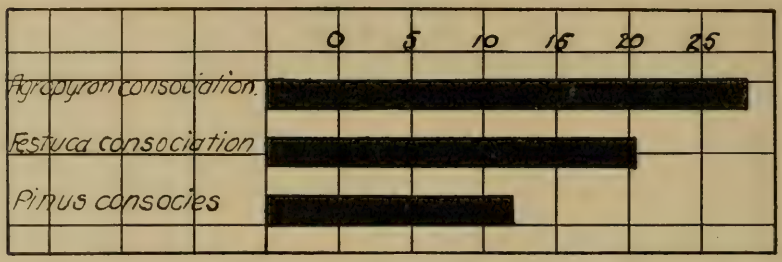


FIG. 4. Average daily evaporation rates in the *Agropyron, Festuca,* and *Pinus* communities during 1913.

are averages of six stations located in the several communities.

The water content of the soils at the preceding stations at Colfax is indicated in Fig. 5. A glance shows that the soils covered by the *Agropyron* consociation had at all times the lowest available water content. Those of *Pinus* and *Festuca* communities are approximately the same, and indeed this condition has been found to exist elsewhere in several similar situations. Isolated determinations at the same stations at various intervals during the following season showed a similar water content relationship.

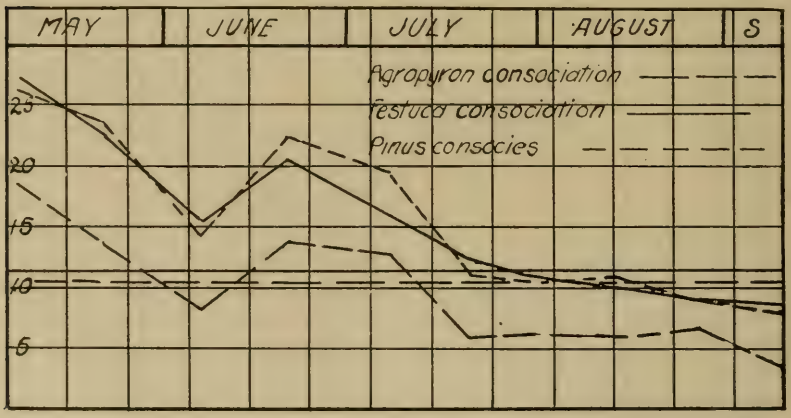


FIG. 5. Graphs showing the march of soil water to a depth of 10 inches in various plant communities at Colfax, Washington.

But the soil water reached its non-available point somewhat earlier. However, the *Agropyron* consociation was the first to exhaust its available supply.

The enormous strain brought to bear upon these early developmental plant communities may be realized when it is noted that after the water of the first 10 inches of soil became unavailable, the evaporation throughout the remainder of the season was very high. Two methods of meeting these adverse conditions are employed by plants of these communities. They either mature early and become dormant upon the approach of drought, or develop very extensive root-systems. But these had best be discussed under structure and development of vegetation.

The mechanical analyses of these soils show that those of the *Agropyron* consociation are of a coarser texture than those of the *Festuca* consociation (Table II). Likewise the humus and volatile matter were found to be lower in the former.

TABLE II

MECHANICAL ANALYSES OF SOILS FROM VARIOUS PLANT COMMUNITIES IN SOUTHEASTERN WASHINGTON AND ADJACENT IDAHO

Station	Gravel Above 2.00 Mm.	Fine Gravel 2.00 to 1.00 Mm.	Coarse Sand 1.00 to 0.50 Mm.	Medium Sand 0.50 to 0.25 Mm.	Fine Sand 0.25 to 0.10 Mm.	Very Fine Sand 0.10 to 0.05 Mm.	Silt 0.05 to 0.005 Mm.	Clay 0.005 to 0.000 Mm.
Agropyron consociation, Colfax	....	....	1.40	1.00	1.80	34.48	54.20	7.04
Festuca consociation, Colfax	....	....	.80	.40	.40	23.30	66.00	9.00
Festuca consociation, Kamiak Mt	.68	.40	1.40	.42	5.80	26.80	54.10	10.83
Pseudotsuga-Larix community, Kamiak Mt	.60	....	.12	.40	1.72	21.60	61.80	4.34
Thuja consociation, Cedar Mountain	6.08	.62	3.60	1.60	3.60	21.65	57.60	5.70
Pseudotsuga-Larix-Abies community, Cedar Mountain	3.56	1.04	1.52	1.08	7.82	25.37	55.40	4.18
Festuca consociation, Northeast slope, Pullman	....	.40	.40	.90	1.50	33.16	53.50	10.03
Festuca consociation, Southwest slope, Pullman	....	....	.60	.60	.40	23.58	73.30	1.49

A chemical analysis not only confirms the low amount of volatile and organic matter, but also shows, as one would expect, the low nitrogen content of the new soil covered with bunch-grass (Table III).

TABLE III

CHEMICAL ANALYSES OF SOILS FROM VARIOUS PLANT COMMUNITIES IN SOUTHEASTERN WASHINGTON AND ADJACENT IDAHO

	Lime, CaO	Potash, K_2O	Phosphoric Anhydride, P_2O_5	Soda Ash, Na_2O	Sodium Trioxide, SO_3	Total Soluble Salts	Volatile and Organic Matter	Insoluble Matter	Humus	Total Nitrogen
Agropyron consociation, Colfax.....	1.08	0.58	0.31	1.32	0.034	15.02	5.35	79.63	1.06	0.096
Festuca consociation, Colfax.....	1.27	0.54	0.29	0.47	0.037	13.77	6.32	79.91	2.88	0.176
Festuca consociation, Kamiak Mt.....	1.03	0.45	0.29	0.06	0.047	13.50	5.95	80.55	2.77	0.182
Pseudotsuga-Larix community, Kamiak Mt.....	0.85	0.32	0.41	0.41	0.030	12.73	4.95	82.32	1.12	0.081
Thuja consociation, Cedar Mountain..	1.17	0.23	0.59	0.07	0.075	14.77	13.65	71.58	6.39	0.399
Pseudotsuga-Larix-Abies community, Cedar Mountain..	0.52	0.23	0.33	0.03	0.044	14.62	8.76	76.62	3.45	0.207

A second set of stations was maintained on Kamiak Mountain, a bold butte lying 9 miles north of Pullman, and one of a series extending in a westerly direction from Thatuna Hills. This butte running from east to west for a distance of over 2 miles, and reaching an elevation of 1,000 feet above the surrounding hilltops, is covered on the south side with prairie, while the steeper north slope bears a dense forest of Douglas fir and western larch (Figs. 36 and 37).

On the south side trees occur only near the summit, where outcropping rocks furnish in their crevices a sufficient shelter and water supply for the establishment of the seedlings. Here is a very open growth of yellow pine which flanks the fir and tamarack and also occupies the less sheltered north base below the fir-tamarack community. In fact, this mountain offered so many interesting conditions of slope, exposure, and vegetational cover, that 13 stations were maintained here during 1913.

Eight miles east, near Viola, Idaho, on another butte slightly lower than Kamiak, but with plant communities very similarly distributed, records from a third set of stations were obtained. Here again the south side is prairie, which the pines, occupying the crest and northwestern slope, are gradually invading. The sheltered northeast side is clothed with a forest of Douglas fir and tamarack. These conditions are representative of numerous other situations (Fig. 46). Only as the mountains become higher and rainfall increases, does the prairie give way to a forest growth. The prairies at Kamiak and Viola are not greatly unlike those upon the basalt as far as kinds of species and their distribution are concerned, but, because of differences in soils and greater exposure to the wind, the vegetation bears a more xerophytic stamp and there are fewer plants per given area, and consequently more soil surface exposed.

Fig. 6 gives the evaporation rates in the various plant communities on Kamiak Mountain, and also that of the pine consocies at Viola, Idaho. A glance at the chart shows at once a direct relation between the evaporating power of the air and the stage in succession. The station on Kamiak in the *Festuca* consociation was on a south slope and only about 60 feet below the edge of the pines. The station in the pines was in a decidedly xerophytic habitat, as is shown by the evaporation graph, which closely follows that of the prairie. The ground was covered with pine needles which almost excluded undergrowth and the atmometers were shaded only indifferently by the open growth of the trees. The evaporation data in a more typical yellow pine habitat located on the northwest slope of the butte at Viola is plotted on the same chart, for the sake of comparison. It corresponds in general with evaporation records secured from a second station in the yellow pines located at the north base of Kamiak Mountain, but from which complete data were not obtained.

Two stations were maintained in the shrub community. One of these was located on the south side of the mountain and on a northeast slope which was occupied by a very typical consocies of *Opulaster pauciflorus,* into which the pines were invading. The evaporation graph is given in the chart. It may be noted that

this station was intermediate in xerophytism, as expressed by the evaporating power of the air, between the two stations in the pines. A second station in the shrub on the north slope of the butte and near the western end was maintained in a dense growth

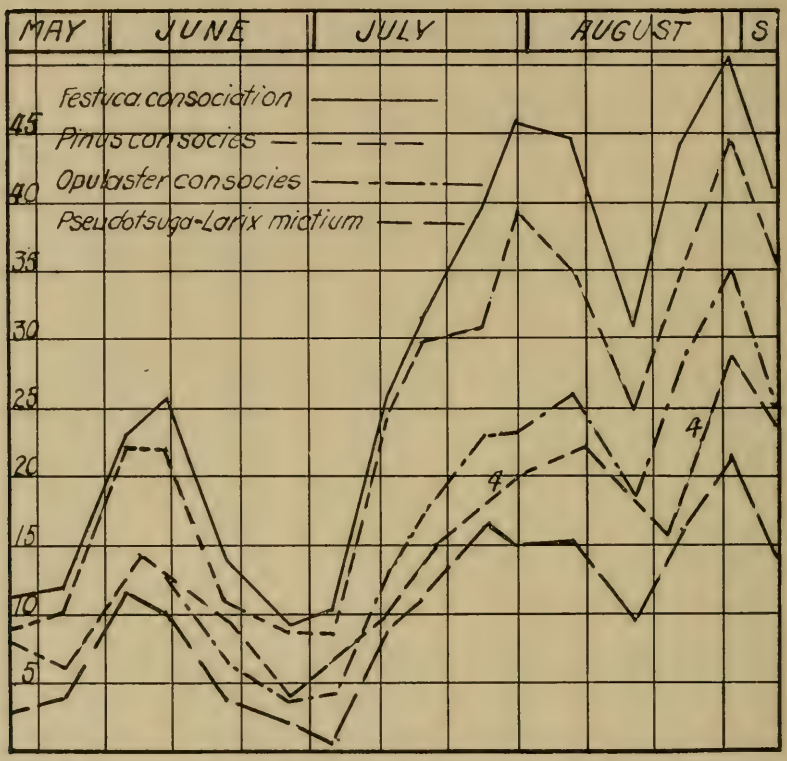


FIG. 6. Evaporation rates in the various plant communities on Kamiak Mountain, and in the Pine consocies (graph 4) at Viola, Idaho.

of *Opulaster-Ceanothus* chaparral. The evaporation rates, not shown in the chart, were much lower, often being less than those in the fir-tamarack forest. In fact, it is not difficult to find situations in which shrubby growth is so dense as to greatly retard evaporation and reduce the light to a point where pine seedlings can not grow.

The station in the firs and tamarack on the north slope of the mountain and only about 60 feet from the top, was in a forest of nearly pure second growth *Pseudotsuga* and *Larix*. These trees are mostly about thirty-five years old and are equally distributed, with a few relict pines and about three per cent. white fir. It may be noted that the graph of evaporation here is decidedly lower than in any other habitat.

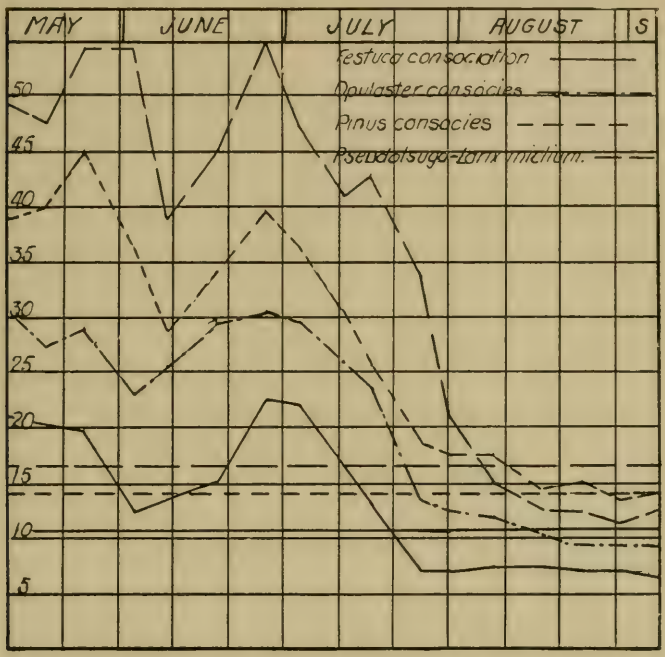


FIG. 7. Graphs showing the march of soil water to a depth of 10 inches in various plant communities on Kamiak Mountain.

The evaporation stations at Viola gave results comparable to those shown on the chart for Kamiak. Without exception, the average daily rate of evaporation in the prairie on the southwest slope was higher than that of the pines on the northwest slope. Likewise, the graph of evaporation in the fir-tamarack forest showed a continuously lower rate than that in the pines.

At the stations on Kamiak Mountain where evaporation data were obtained, water content samples were taken at the same intervals of time. These data have been plotted in graphic form in Fig. 7. The water content of the soils of the pine consocies was obtained from the station at the north base of the mountain, that of the shrub from the *Opulaster* consocies on the northeast slope. The gradual depletion of the water content of these soils to the end of the growing season is characteristic. To fully appreciate the conditions represented on the chart, a description of the soils is necessary.

A mechanical analysis of the soils shows that those of the prairie are somewhat coarser textured than those of the fir-tamarack community (Table II). Likewise, a chemical analysis of these two types of soil shows that among other differences there is a markedly lower humus and total nitrogen content in the soils of the forest (Table III). This is due to fires burning out the organic matter.

The greatest difference in the soils, however, and the one which most profoundly affects the vegetation in this semi-arid region is their water holding capacity. An average of 6 tests showed the prairie soils on Kamiak had a water holding capacity of 48 per cent., while the finer soils of the north slope which support a forest of fir and tamarack hold 78 per cent. of their dry weight of water. The water holding capacity of the soil of the pine consocies was intermediate between the preceding. We may compare the soils of this region to a gigantic reservoir replenished mostly during the non-growing season and rather thoroughly emptied of its water during the summer.

The actual amount of water available to the forest- and shrub-covered soils of the protected slopes and ravines is often considerably greater than that of the prairie. Snow is blown from the wind-swept prairie and deposited on the sheltered slopes. I have seen such drifts 20–25 feet deep along the brow of Kamiak Mountain. The late melting of the snow makes a locally late spring and consequently shortens the period of drought in late summer.

Soil samples taken on Kamiak Mountain in May and in July, 1914, bear out the conditions found in the previous year, but

here, as at Colfax, the available water was exhausted somewhat earlier than in the summer of 1913. On July 14, 1914, and when the available moisture of the surface ten inches had been depleted in all habitats, samples were taken as usual at a depth of two feet in the prairie and fir-tamarack communities respectively. These showed that practically no water was available even at this depth.

The relation of soil moisture to plant succession was likewise determined at the stations already described near Viola, Idaho, during 1913. The results are plotted in Fig. 8. These graphs

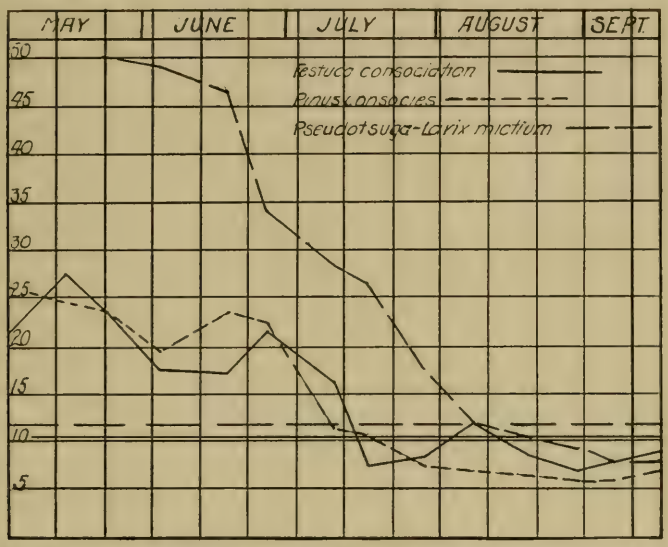


FIG. 8. Graphs showing the march of soil water to a depth of 10 inches in plant communities at Viola, Idaho.

appear somewhat different from those at Kamiak. This is due in part to the longer intervals between readings. Also the fir-tamarack station was somewhat less mesophytic than that at Kamiak, but like the former, was covered with a second growth of Douglas fir and tamarack. Likewise, the pine community was of a much more open type than that on the sheltered base of Kamiak Mountain. The water holding capacity of the soil at

this station in the fir-tamarack community was 60 per cent., that of the prairie and pines about 45 per cent. On August 14, 1914, the water content at each station was found to be somewhat lower than on the same date of the preceding year. Samples taken to a depth of 3 feet in the prairie showed that all of the available water had been used. Indeed, at this time, practically all of the vegetation except *Hoorebckia racemosa, Solidago missouriensis, Carum gairdneri,* and a few other serotinal bloomers had dried up. An examination of the root-systems of numerous prairie species shows, however, that many of them obtain water at much greater depths than 3 feet (Figs. 15*a*, 15*b*, and 15*c*). In the underlying rocky soil on this butte it is probable that considerable water was still available at this date. Because of the rocks, I was unable to secure samples at greater depths than 2 feet in the pine community, but these soils on August 13, 1914, were even drier than those in the prairie. Likewise, the deeper soils in the fir-tamarack community were very dry.

The close similarity in water content between the soils of the prairie and pine communities is just what one might expect when the latter consocies was still quite open and only small amounts of organic matter had been added to the soil. There is a close similarity between these graphs and those obtained at Colfax in communities of about the same stage of development.

In order to determine the relation between the evaporating power of the air and the water content of the soil in the cedar community as compared with earlier stages in succession, a series of stations was maintained on Cedar Mountain during the summers of 1913 and 1914. A station was maintained in an area of the climax cedar forest which occupied a north slope and a ravine through which flows a small stream. This forest is over 95 per cent. pure cedar, mostly large trees from 2 feet to more than 3 feet in diameter. The rest of the trees are large white firs, most of which are dead. The characteristic undergrowth of mesophytic shrubs and herbs need not be described here.

About 700 feet beyond the station in the cedars and occupying a slope somewhat above the latter, a station in the fir-tamarack community was maintained. The Douglas fir and tamarack are

the principal trees, but a considerable amount of white fir and some spruce (*Picea engelmanni*) are also present. The undergrowth is rather sparse.

The evaporation in the cedar forest was always lower than that in the preceding developmental communities. The data taken in the cedars are shown in Fig. 9. Those of the other forest sta-

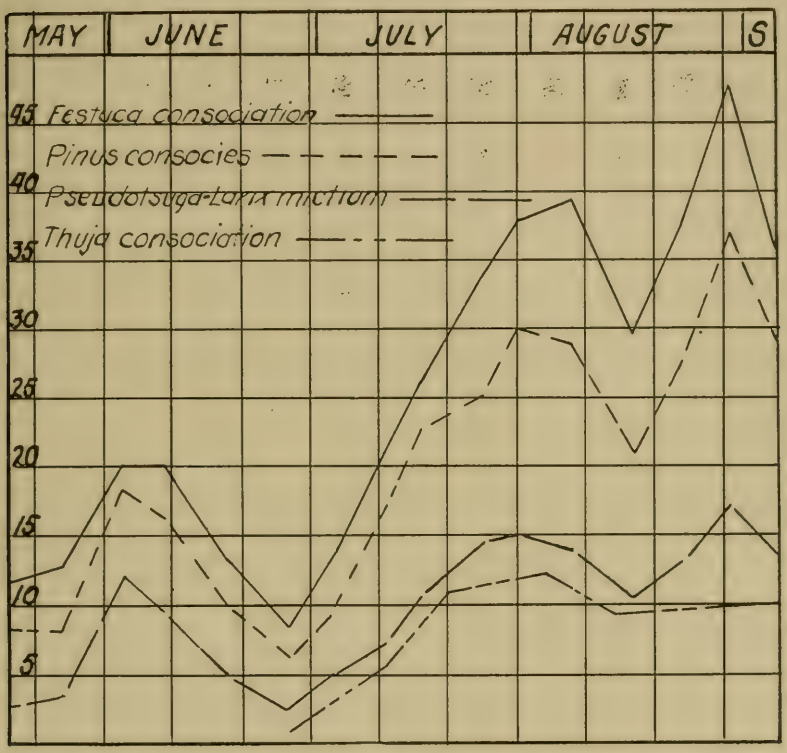


FIG. 9. Combined graphs showing the average daily evaporation rates at all the stations in the prairie, pine, and fir-tamarack communities on the buttes and mountains. The lowest graph gives the average daily evaporation in the *Thuja* consociation.

tions are shown combined with all other readings taken in the fir-tamarack forest. For the sake of comparison, the chart also gives combined graphs showing the average evaporation rates in

the butte-prairie and yellow pine communities. These data show a marked relationship between the evaporating power of the air and the stage of succession. Fuller (4, 5) has determined a similar relationship for the plant consocies which culminate in the beech-maple climax forest. It is interesting to note in this connection that the evaporating power of the air in the *Thuja* climax forest is only slightly greater (0.5 c.c. daily in 1913) than that of the beech-maple forest climax of the East.

In order to further check these results, evaporation readings were taken again in the cedars and fir-tamarack on Cedar Mountain during 1914. To this series of stations was added one in a very open yellow pine consocies on a wind-swept western slope. The results are given in Table IV.

TABLE IV

SHOWING THE AVERAGE DAILY EVAPORATION RATES IN THE PINE, FIR-TAMARACK, AND CEDAR COMMUNITIES DURING THE SUMMER OF 1914

	July 3–11	July 11–18	July 18–25	25–Aug. 1	Aug. 1–7	Aug. 7–14
Pines	19 c.c.	24	37	35	40	34
Fir-tamarack	13 c.c.	13	20	20	23	22
Cedars	10 c.c.	10	14	16	18	17

A record of the water content of the soils at the stations in the cedars and fir-tamarack on Cedar Mountain was kept from June 14 to September 17, 1913. During 1914 this was repeated for a period, and to this a record of the soil moisture at the station in the pine community was added. The results are shown graphically in Fig. 10. A glance shows that the cedars occupy by far the most mesophytic habitat. The high wilting coefficient indicates at once a fine textured soil with considerable organic matter. A mechanical soil analysis (Table II) reveals just such characteristics. This is in marked contrast to the coarse sandy loam of the station in the pine. Likewise, a chemical analysis (Table III) shows 13 per cent. of volatile and organic matter in soils of the cedar community, and 8 per cent. in those occupied by the firs and tamaracks. The water holding capacity of these soils is remarkably high. It was found to be over 100 per cent. of their

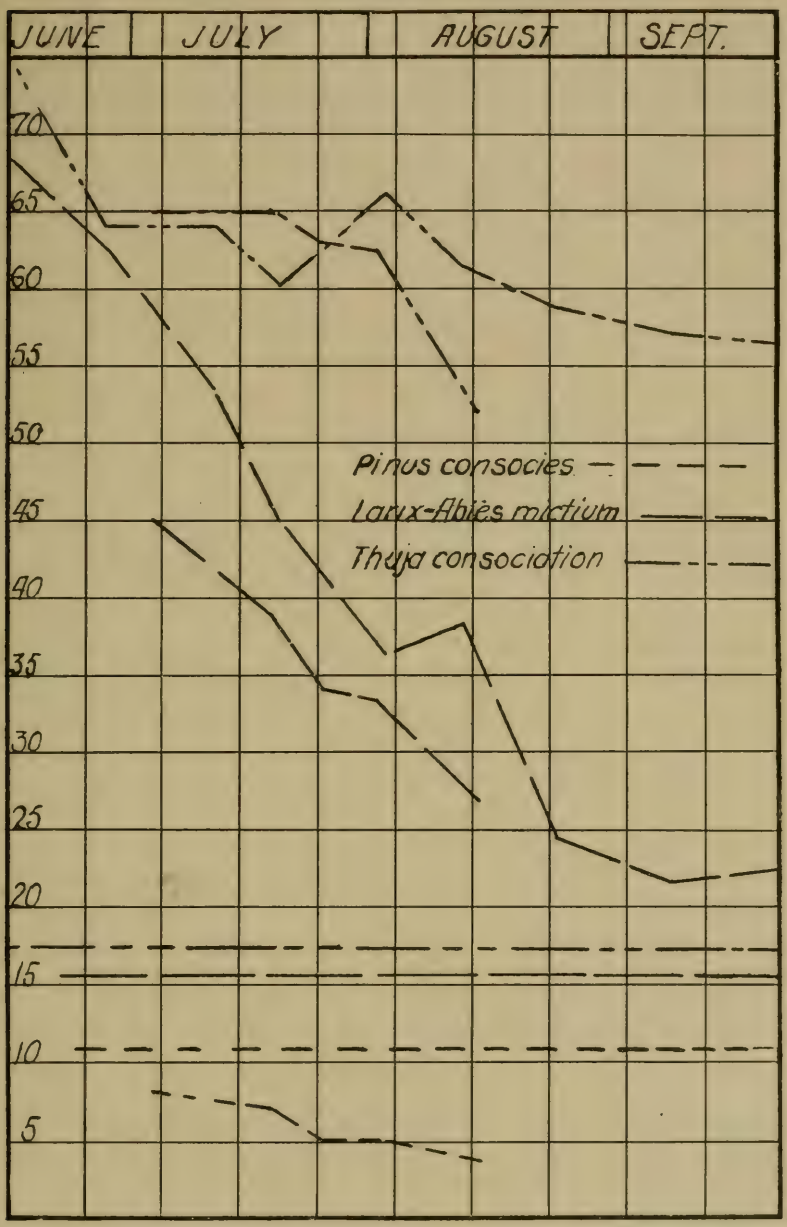


FIG. 10. Graphs showing the march of soil water in various plant communities on Cedar Mountain.

dry weight. The chart shows that at no time did these virgin forests of fir-tamarack or cedar exhaust all of the water in the surface ten inches of soil. Likewise, samples at a depth of 2 feet on August 1, 1914, gave a water content of 66 per cent. and 19 per cent. in the cedar and fir-tamarack forest respectively. Similar determinations at 2 feet in the rocky pine-covered soils gave a water content of about 10 per cent., which is very near the wilting coefficient. The slow growth and dwarfed appearance of these trees reflect the unfavorable habitat conditions.

These studies on the evaporating power of the air and the amount and range of soil moisture in different plant communities may be briefly summarized.

Evaporation at different stations within the same plant community exhibits variations similar both in character and degree, and the variations in the rate of evaporation gradually become less and less as the climax type of vegetation is approached.

The great amount of evaporation in the earlier stages of succession seems a sufficient cause for the xerophytic character of the vegetation.

A study of the differences of the rates of evaporation in the various plant communities shows that these differences are sufficient to be important factors in causing succession, at least through the earlier stages, where light does not play an important rôle.[1]

If sufficient light is available, there is no question but that humidity of the air and the soil are the most important factors

[1] While reading proof of this manuscript the recent paper by Gates came to the writer's notice. (Gates, F. C. The relation between evaporation and succession in a given area. Am. Journ. Bot., 4: 161–178, 1917.) As a result of an investigation carried on at Douglas Lake, Mich., he concludes that a decrease in evaporation is not a prerequisite to succession; lowered evaporation being coincident, with and not an antecedent to it. Gates worked in a region with summer rainfall, where the average daily rates of evaporation were low. The highest average daily summer evaporation obtained on open ground was only 14.7 cc. Certainly his conclusions are not applicable to a region of practically no summer rainfall and where, in areas covered with bunch-grass, the daily evaporation rate for the whole growing season averaged 28 to 37 cc., with the average daily rate for cer-

affecting the establishment of the different plant communities. The progressive increase of the humidity of the habitat causes a corresponding increase in the mesophytism of the plant associations. This change of plant population from the xerophytic to the mesophytic type is a phenomenon called succession.

The evaporation rates and the amount of soil moisture in the various communities vary in general directly with the order of their occurrence in the succession, the climax community being the most mesophytic in both respects.

SOIL TEMPERATURE IN RELATION TO SUCCESSION

The temperature of the soil gives in a general way a summation of the heat factors of the habitat. It combines the effects of direct insolation and radiation, cooling by the retention of snow or by the evaporation of moisture, and variations in temperature caused by the passage of currents of air. Since plant communities react directly on temperature, a large number of soil temperature readings were made in the various plant communities to de-

tain weeks in mid-summer, even in well developed prairie, reaching 64 cc. (Gates highest evaporation rate on open ground for a single week is 21.6 cc. per day.)

Students of succession should keep in mind that the evaporating power of the air affects the possibility of water intake as well as water outgo. High rates of evaporation rapidly deplete the surface soil of water as well as desiccate the plant. Mesophytes can not establish themselves under such conditions. It is only after a cover of xerophytes cuts down the great evaporating power of the air in the stratum in which seedlings develop, by shading and by inhibiting wind movement that mesophytic plants can establish themselves. Mesophytes do not replace xerophytes in succession until the reaction of the latter on the habitat is such as to make possible the requisite conditions of soil and air humidity, *i. e.*, a condition where sufficient water is available in the soil and air, so that transpiration may not exceed absorption. That evaporation is further reduced by the mesophytes is repeatedly shown in the preceding data. Conditions for plant life are then less severe and even more mesophytic plants can establish themselves and become dominant.

This concept is in agreement with Fuller's conclusion, which he reached after several years of study in the Chicago region (5). Further evidence is brought forward in a recent paper dealing with the prairie-forest problem in Minnesota and Nebraska. (Weaver, J. E., and Thiel, A. F. The Bot. Surv. Nebr., N. S., 1: 1–60, 1917.)

termine the relation between this factor and succession. Readings at depths of 2 and 10 inches respectively, were taken at the same stations and at the same time that soil samples for moisture determinations were secured. In addition to these a large number of readings near the soil surface, in the soil surface, and at depths of one and two feet respectively, were made from time to time. Many of the temperature readings were made simultaneously, and in all cases recorded the interval between the readings at the various stations was so short that the error thus introduced is almost negligible. This possible error was further reduced by taking the readings in the various habitats at any set of stations in varying sequence.

An examination of these data shows almost uniformly a decrease in soil temperature as the climax communities are approached. The following tables, selected as representative from these data, are illustrative:

TABLE V

SHOWING THE RELATION OF SOIL TEMPERATURE TO PLANT SUCCESSION

Colfax, Wash., 1913

	Agropyron Consociation	*Festuca* Consociation	*Pinus* Consocies	*Agropyron* Consociation	*Festuca* Consociation	*Pinus* Consocies	
	Depth, 2 Inches			Depth, 10 Inches			
May 7		20.°C.	8.7	15.0	13.0	6.0	
June 6	31.0	21.5	12.5	19.5	15.0	12.0	
June 20	17.5	16.2	12.5	15.5*	15.0*	12.5*	9 A. M.
June 20	22.5	17.5	12.5	20.0*	16.5*	12.5*	2 P. M.
June 20	21.5	17.5	13.0	19.0*	17.0*	12.5*	6 P. M.
July 7	29.0	19.5	15.0	27.0*	19.0*	14.5*	
July 21	26.5	23.0	18.0	25.5*	22.0*	16.7*	9:15 A. M.
July 21	28.0	22.5	17.5	27.0*	24.0*	17.0*	1:30 P. M.
July 21	32.5	22.0	18.0	29.5*	25.0*	17.5*	6 P. M.
July 30	35.0	22.0	14.0	28.0*	20.0*	14.2*	
August 13	20.5*	18.5*	15.0*	22.0	18.5	14.5	
August 27	26.5	20.0	15.0	22.5	18.0	14.0	
September 10	22.5*	13.0*	11.5*	19.5	14.5	12.5	

* Readings taken at a depth of 4 inches.

Kamiak Mt., 1912

	Festuca Consociation	*Pinus* Consocies	*Pseudotsuga-Larix* Mictium	*Festuca* Consociation	*Pinus* Consocies	*Pseudotsuga-Larix* Mictium
	Surface			Depth, 12 Inches		
May 3	11.0° C.	7.5	6.0	8.0	7.0	5.0
May 12	27.5	15.5	10.5	15.5	13.0	8.5
May 25	11.5	11.0	9.5	13.0	10.5	7.5
June 1	21.5	17.5	14.0	31.5	13.0	9.0

1913

	Depth, 2 Inches			Depth, 12 Inches		
May 17	10.0° C.	7.5	5.2	9.5	7.0	5.0
May 24	16.5	12.2	9.5	15.5	9.5	7.5
June 2	18.5	14.5	10.2	18.0	11.7	10.2
June 8	24.5	13.0	11.0	18.0	11.5	10.5
June 17	23.2	12.5	8.5	15.5	10.7	8.5
June 26	14.2	11.5	9.5	12.5*	10.2*	9.5*
July 2	9.7	11.5	9.2	10.7*	11.5*	8.7*
July 15	17.0	12.2	10.2	16.5*	11.7*	10.5*
July 27	35.0	17.5	16.0	24.5	14.5	13.0
August 6	22.0	....	14.5	21.0	....	11.5
August 15	19.7	12.5	10.5	17.5*	12.5*	10.5*
August 22	25.5*	16.5*	14.5*	22.5	14.0	12.5
August 29	27.0*	16.0*	15.2*	23.0	14.5	13.0
September 5	21.5*	13.2*	11.2*	18.0	13.2	11.2

* Readings taken at a depth of 4 inches.

Viola, Idaho, 1913

	Festuca Consociation	*Pinus* Consocies	*Pseudotsuga-Larix* Mictium	*Festuca* Consociation	*Pinus* Consocies	*Pseudotsuga-Larix* Mictium
	Depth, 2 inches			Depth, 10 inches		
May 3	9.5°C.	5.0	1.5	6.5	4.5	1.5
May 24	18.0	10.0	10.0	13.5	8.5	7.5
June 18	16.0	12.0	11.0	15.0	11.0	9.0
June 26	21.0	12.0	11.0	19.5*	11.0*	11.0*
July 10	21.0	13.0	12.0	20.5*	12.5*	11.7*
July 17	23.5	11.5	11.0	20.0*	11.5*	10.5*
July 29	17.5	12.5	12.0	19.0	11.5	10.5
August 8	18.5	14.0	13.0	20.0	13.5	13.0
August 20	28.0	13.7	11.7	19.0	13.0	11.5
August 30	25.0*	16.0*	14.0*	21.0	15.0	13.0
September 6	24.0	12.7	11.0	17.5	13.0	11.0

* Readings taken at a depth of 4 inches.

Cedar Mt., 1914

	Pinus Consocies	*Larix-Abies* Mictium	*Thuja* Consociation	*Pinus* Consocies	*Larix-Abies* Mictium	*Thuja* Consociation
	Depth, 2 inches			Depth, 10 inches		
July 3	21.0°C	14.5	13.0	17.0	10.0	10.0
July 18	18.5	13.0	12.0	16.0	11.0	10.5
July 25	19.5	12.0	11.0	.....	10.5	9.5
August 1	18.0†	7.5†	6.5†	21.0	12.5	11.5

† Readings taken at a depth of 2 feet.

A discussion of light values as affecting succession had best be given in connection with the study of the development of the forest communities.

THE PRAIRIE-PLAINS FORMATION

The prairies represent an extreme westward extension of the prairie-plains formation east of the Rocky Mountains.[1] This great grass land area is here represented by the *Agropyron-Festuca* association. It occupies a belt of varying width between the desert scrub formation on the west and the Pacific Coast forest formation on the east. Thus three vegetational frontiers are seen to meet within the region covered by the present investigation. Altitudinally, it occupies an area whose westward boundary has an elevation of 1,200–1,300 feet, while eastward it reaches an altitude of about 3,500 feet.

The prairies are limited on the east by that combination of climatic and edaphic factors which make tree growth possible, a type of vegetation with which the prairie can not favorably compete. The changed climatic conditions are largely due to increased altitude and are especially expressed in greater precipitation. Likewise, coniferous tree growth is demarked more or less

[1] At the present time, I am not quite clear whether we should properly speak of the prairie-plains formation or whether, indeed, we have here two grass land formations. In any case, the vegetation of the *Agropyron-Festuca* association more nearly simulates that of the prairies proper, *Agropyron spicatum* being an ecological equivalent of *Andropogon scoparius* east of the mountains.

clearly by the edge of the great lava sheet. Exceptions to this are seen especially along river canyons where xerophytic forest trees, such as pines, may follow down the canyons, and extend out upon the basaltic soils. Indeed, in the canyon of the Palouse River a belt of such woodland extends clear across the prairie community and drops out only at an altitude of 1,450 feet, and where it meets the desert scrub formation. But because of the peculiar rigors that forest frontiers meet, tree species invade the prairie with extreme slowness, notwithstanding the fact that there may be sufficient soil moisture in such situations for the maintenance of a woodland cover.

On its lower and western border the prairie-plains formation gives way to the desert scrub formation. No sharp geographical boundary can be drawn between the two formations. Under the stress of low available soil water, the rainfall being here only 12 to 14 inches, soil depth plays a determining rôle. The prairies, with the loss of their less xerophytic components, extend far westward and to lower elevations upon deep soil. On the other hand, the desert scrub formation, occupying the shallow soils of the scab-lands and rim-rock, may extend far into the prairies. Indeed, about Rock Lake and thence eastward along Pine Creek, the scab-land sage is represented clear to the Idaho boundary. Likewise, it occupies a zone in the warm Snake River Canyon, extending through the prairie region.

As would perhaps be anticipated from the nature of the transition zone occupied by the *Agropyron-Festuca* association, its composition in the drier portion is strikingly different from that of the well developed upland part. The latter is characterized not only by a greater number of important non-grassy species and a denser plant cover as well as by the absence of certain characteristic desert plants, but also by a change in habit of a dominant grass, *Agropyron spicatum* (including var. *inerme*), which under the less xerophytic conditions abandons its bunch habit in part and becomes a sod former. Because of these differences the formation may be separated into a more xerophytic part, the *Agropyron* consociation, and a less xerophytic *Festuca* consociation.

The Festuca Consociation

This consociation occupies the larger part of the area covered by the prairie-plains formation. Along the thin soils of the canyons the ecotone between this and the *Agropyron* consociation is often very sharp, but westward and southward it shades imperceptibly into the latter.

The plants that share in the botanical composition of this consociation in eastern Washington and adjacent Idaho are given in the following lists of species which are classified into three groups based upon their relative abundance and ecological importance.

Composition of the Festuca Consociation

Dominant Species

Agropyron spicatum (including var. *inerme*)[2]
Balsamorhiza sagittata
Festuca ovina ingrata
Koeleria cristata
Poa sandbergii

Principal Species

Achillea millefolium lanulosa
Astragalus arrectus
Erythronium grandiflorum
Geranium viscosissimum
Helianthella douglasii
Hoorebekia racemosa
Hieracium scouleri
Leptotaenia multifida
Lupinus ornatus
Potentilla blaschkeana
Rosa nutkana
Sieversia ciliata
Symphoricarpos racemosus

Secondary Species

Agoseris grandiflora
Agoseris heterophylla
Allium acuminatum
Alsine nitens
Antennaria luzuloides
Apocynum pumilum
Arnica fulgens
Aster fremonti
Aster laevis geyeri
Astragalus spaldingii
Bromus brizaeformis
Bromus hordeaceus

[2] The nomenclature in this paper is that of the *Flora of Southeastern Washington and Adjacent Idaho,* by C. V. Piper and R. Kent Beattie, 1914.

Calochortus macrocarpus
Carum gairdneri
Carex geyeri
Castilleja lutescens
Circium foliosum
Circium palousense
Claytonia linearis
Clematis hirsutissima
Cogswellia triternata
Collinsia tenella
Comandra pallida
Deschampsia calycina
Drymocallis convallaria
Elymus glaucus
Epilobium adenocaulon
Epilobium angustifolium
Epilobium paniculatum
Erigeron corymbosus
Fritillaria pudica
Galium boreale
Gaillardia aristata
Gentiana oregana
Gilia gracilis
Heuchera glabella
Hookera douglasii
Iris missouriensis
Linum lewisii
Lithospermum ruderale
Lupinus leucophyllus
Lupinus wyethii
Mertensia oblongifolia
Olsynium grandiflorum
Orthocarpus tenuifolius
Pentstemon confertus
Phlox speciosa
Poa ampla
Senecio atriapiculatus
Sidalcea oregana
Silene douglasii multicaulis
Solidago missouriensis
Synthyris rubra
Trillium petiolatum
Vaccinium caespitosum
Valeriana edulis
Viola adunca
Wyethia amplexicaulis
Zygadenus venenosus

The prairies of eastern Washington, because of their grassy verdure and sod-like appearance in spring and early summer, gave rise to the term Palouse (Fr. pelouse, a land clothed with a short, thick growth of herbage), a name applied by the Jesuit missionaries. However, as the dry summer season progresses the prairies become quite brown and dry, except on the steeper north hillsides and in the moist valleys. The south and southwest slopes present a vegetational cover with a decidedly more xerophytic stamp than the latter situations. Indeed, this is so pronounced that rather careful and extensive investigations of the different habitat conditions were made. Although a part of these results

have been published elsewhere (16, 17), it seems well worth while considering them in a brief manner at this time.

Two stations were maintained in these prairies throughout the

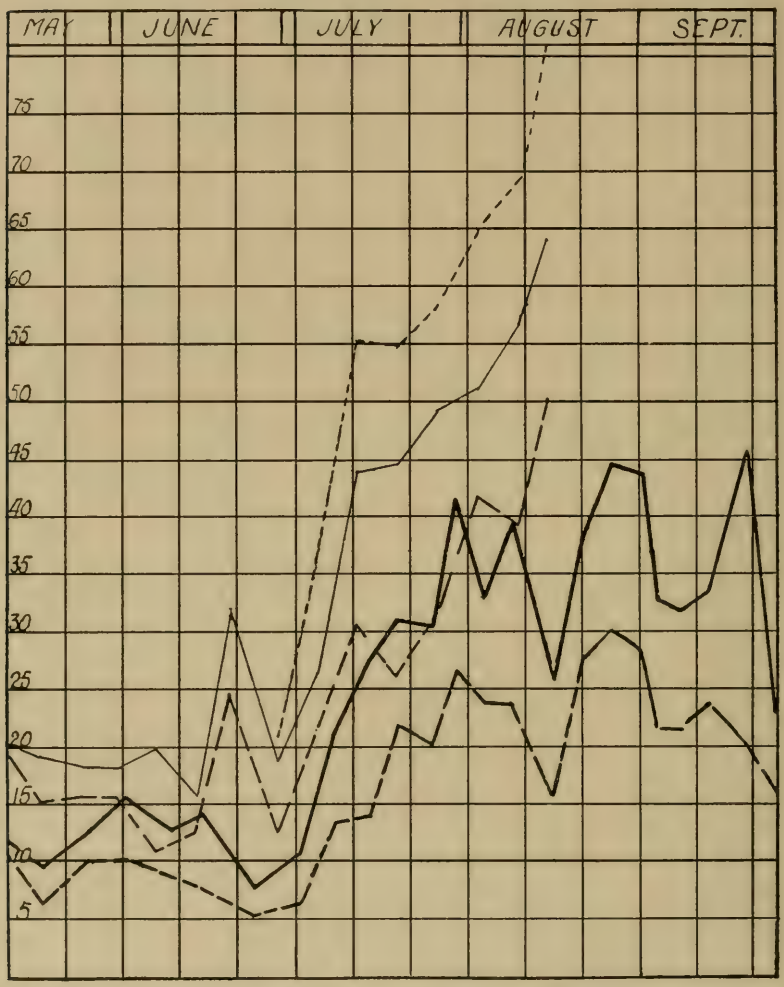


FIG. 11. Evaporation rates on a southwest slope (solid lines) and a northeast slope in the *Festuca* consociation during 1913 (heavy lines) and 1914. The dotted graph gives the evaporation rates on the southwest slope and at a height of 50 centimeters during 1914.

growing seasons of 1913–14. One was located on a southwest slope about 65 feet from the crest of a hill somewhat less than the average height, and another at an equal distance from the crest of the same hill and on an average northeast slope. The average daily evaporating power of the air at the two stations respectively is shown in Fig 11.

An inspection of these graphs shows a remarkable similarity in the general course of either pair throughout the season. However, the difference in the amount of evaporation on north and south slopes is just as striking. During 1913 the average daily evaporation on the northeast slope was 16 c.c., which is only 64 per cent. of that on the southwest slope (25 c.c.). The season of 1914 was considerably drier and gave higher evaporation rates on both slopes (23.9 c.c. on northeast, and 33 c. c. on southwest) with a ratio on the two slopes of 72 : 100.

The evaporating power of the air on the southwest slope and at a height of 50 cm. is also shown in the figure. It may be seen that the evaporating power of the air at this height is increased 20 to 26 per cent. over that at 17 to 23 cm. This factor of increased desiccation plays an important rôle in determining the low stature of many of the prairie plants. Because of the cool nights, about 80 per cent. of these high water losses occur during the day. When we consider that the daily evaporation in July and August often reaches 40 to 55 c.c., and at a time when the available soil moisture is depleted to a depth of two feet, we can see the necessity for extensive root-systems in the substratum as well as aërial structures for enduring drought.

The greatest factor in causing the differences in evaporation on the two slopes is the same one that has so profoundly influenced the topography, namely, the wind. During the season of 1913 (April 16 to September 3) the wind was from a southerly direction 68 per cent. of the time and a total of 13,605 miles passed over the southwest slope at a height of 50 cm., while only 56 per cent. as many miles were recorded by an anemometer similarly placed on a northeast slope. In general, these conditions were duplicated in the season of 1914 with the ratio of 100 : 49. Since the factors of temperature, humidity, and wind movement are

quite satisfactorily summed up by measuring the evaporating power of the air, the differences of temperature and humidity shown in the two habitats need be discussed only briefly. Although the plant community reacts directly upon temperature, humidity, and wind, and these react upon each other, the response of the plant is controlled by humidity.

The temperature of the air at a height of 8 cm. above the soil surface as recorded by thermographs and checked by a large number of thermometer readings shows a mean daily range varying from about 25° F. in April and May, to 38° F. in July and August. The daily maximum air temperature is reached somewhat earlier on the north than on the south slope, and is from 2°–3° F. lower.

The steep hillsides are often in the shadow long before the setting of the sun. For long periods during the winter months the sun does not strike the steep north slopes, as is evidenced by the presence of frost, which may soon be melted elsewhere.

A continuous record of humidity kept for more than two complete growing seasons shows that the air is often 5–10 per cent. drier on the exposed than on the sheltered slopes. It is not uncommon on dry slopes and during late afternoons for the humidity to fall to 15–20 per cent., while during the night it may rise again to 75 per cent. or even to 95 per cent.

These data on aërial physical factors show conclusively that the plants on south slopes are subjected to much more severe conditions as concerns water loss than those on sheltered hillsides. Likewise the water supply of the former is usually less and this supply is depleted much earlier in the growing season. Before taking up the subject of soil moisture, however, other important differences in the soil occupying the two slopes should be noted.

The wind has drifted much soil and humus materials from the exposed south slopes and deposited it on the steeper north and northeast leeward slopes. The difference in the mechanical composition of the first foot of prairie soils on the two slopes respectively, is shown in Table II.

The humus content of the soils of north hillsides is greater at all depths to 5 feet, in some cases more than 12 per cent. greater,

than on the exposed slopes, as was shown by six sets of humus determinations made for each foot of soil on the two slopes, respectively. This combination of more clay and more humus on the north and northeast slopes reflects itself especially in the increased water holding capacity of the soil. An average of six determinations gave a mean water holding capacity of 56 per cent. (based on dry weight at 104° C.) for the first foot of soil on north slopes, as compared with 48 per cent. on south slopes. This margin of 8 per cent. is rather an important difference in favor of the soils on the protected slopes, since the wilting coefficients of the two soils differ but little. These substratum differ-

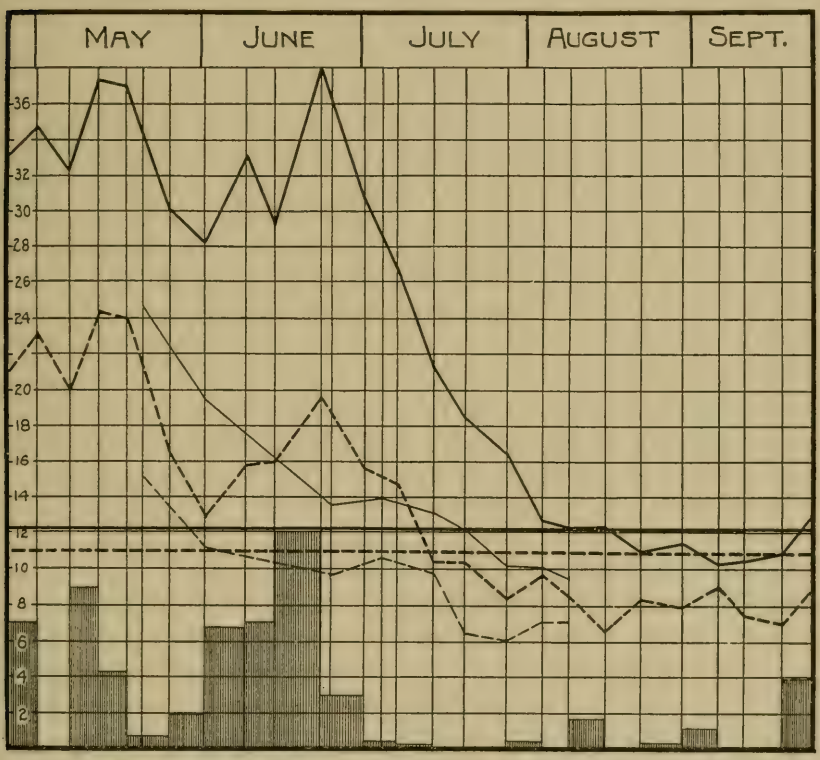


FIG. 12. Graphs showing the march of soil water to a depth of 10 inches from April to September, 1913 (heavy lines), and from May to August, 1914, on a northeast slope (solid lines), and a southwest slope, respectively.

ences are pointed out here since it will be shown later that certain plants are quite confined to moist north and northeast hillsides.

Studies of the water content of these soils have been carried on since the spring of 1912. It will be unnecessary to burden the reader with all of the data and graphs obtained, and only enough will be given to make plain the seasonal march of soil water. In Fig. 12 are graphs giving the march of soil water from April 25 to September 25, 1913, on a typical northeast and southwest slope, respectively. The ordinates represent percentages of soil moisture in the first ten inches of soil. The rainfall between the intervals of readings is also shown in inches, each ordinate representing 0.1 inch. The horizontal solid and broken lines show the wilting coefficients of the soils on the northeast and southwest slopes respectively. The greater amount of moisture on the northeast slope (in some cases being twice that of the southwest slope) may be noted at a glance, while the fact that the soil on the exposed slope reached its wilting coefficient about July 15, and more than five weeks before similar conditions obtained on the sheltered slope is significant. Records for the fall of 1913 were discontinued when the rains of late September replenished the parched soil. In 1914 these ten-inch soil moisture determinations were made only at longer intervals and with the object of determining the time at which the wilting coefficient was reached. The water contents on the dates of these determinations are indicated by the light lines, the solid line representing soil moisture on the northeast slope. The rainfall for June, 1914, being approximately normal (and not 1.6 in excess of the mean, as in 1913) the wilting coefficient of these soils was reached much earlier than in the preceding year. An examination of these determinations, together with the rainfall records at Pullman, shows that at no time after June 8 and until September 14, was there water available for plant growth in the first ten inches of soil on the southwest slope. The autumn and winter rains replenish the soil of the water lost during the long period of drought and in the following spring it again shows a maximum water content.

It is apparent from these data that prairie plants must obtain their water from greater depths than ten inches, at least during the dry summers. In fact, some of these plants penetrate to a depth of 12 or 13 feet, while most of them get the bulk of their

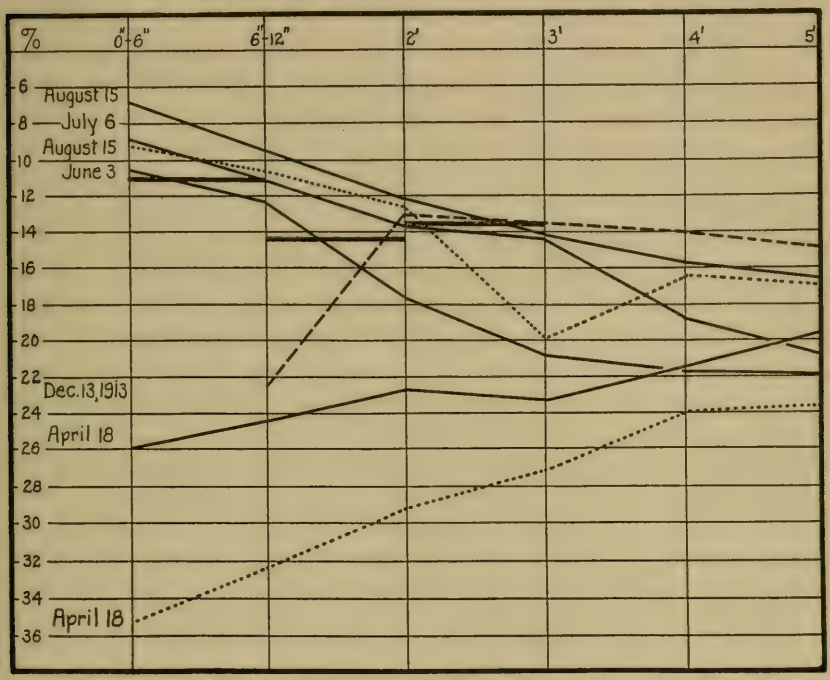


FIG. 13. Graphs showing the march of soil water to a depth of 5 feet on a southwest slope from April 18 to August 15, 1914; and the water content of the soil on December 13, 1913. The dotted lines indicate water contents on a northeast slope.

water from the second to the sixth foot of soil (Figs. 15*a*, 15*b*, and 15*c*). Consequently, a consideration of soil moisture at these depths is imperative for a proper understanding of root environment. These deeper soil water determinations (many to a depth of 8 feet) were taken at intervals from December, 1912, to August, 1914. Fig. 13 (solid lines) shows the march of soil water from early spring until late summer of 1914, on a southwest slope. It is apparent that there was still a downward movement of water

at depths of 4 and 5 feet after April 18, but from June 3 to August 15 the soil moisture was gradually depleted at all depths to 5 feet. The heavy horizontal bars give the wilting coefficients at the depths indicated. On July 6 no water was available in the second foot of soil and only a small margin over the wilting coefficient was present at 3 feet. The broken line indicates that on December 13 of the preceding winter the soil was drier at three, four, and five feet respectively, than at any other time indicated. The fall rains had not then penetrated beyond 2 feet. While excavating root-systems during the fall, winter, and spring, an excellent opportunity was offered to study the rates of penetration. The water penetrated very slowly and at about equal rates on all slopes. By October 18 only the surface layer of 8 inches was wetted, and in late March the wet soil reached a depth of not more than 4 feet. The dotted graphs in the figure indicate the soil moisture on the northeast slope.

Aside from the lower temperature and greater humidity of the north slopes, the actual amount of moisture available to these soils is important in explaining the observed differences in moisture content. The wind drifts over to the sheltered slopes much snow, which upon melting adds to the soil water. Two examples will suffice. In February, 1914, exposed prairie slopes had a blanket of snow from 5 to 8 inches deep, while on the sheltered slopes at the same time drifts 48 to 52 inches were measured. The second, while an extreme case, is illustrative. During February and March, 1913, while only one foot of snow lay on the south and southwest slopes, the protected northeast slopes were covered with drifts of well-packed snow from 10 to 13 feet deep.

In Fig. 14 is shown the march of soil water similar to that in the preceding figure, but for soils of a northeast slope. Here again, the downward movement of water at 3–5 feet after April 18 is apparent, as is also the gradual depletion of soil water at all depths to 5 feet. Likewise, the broken graph indicates conditions similar to those explained for the corresponding graph in Fig. 14. On August 15 no soil water was available above the two-foot level. If the graphs in this figure are compared with the corresponding graphs in the preceding one it may be readily

seen that a much higher water content was maintained in the soils on the northeast slope.

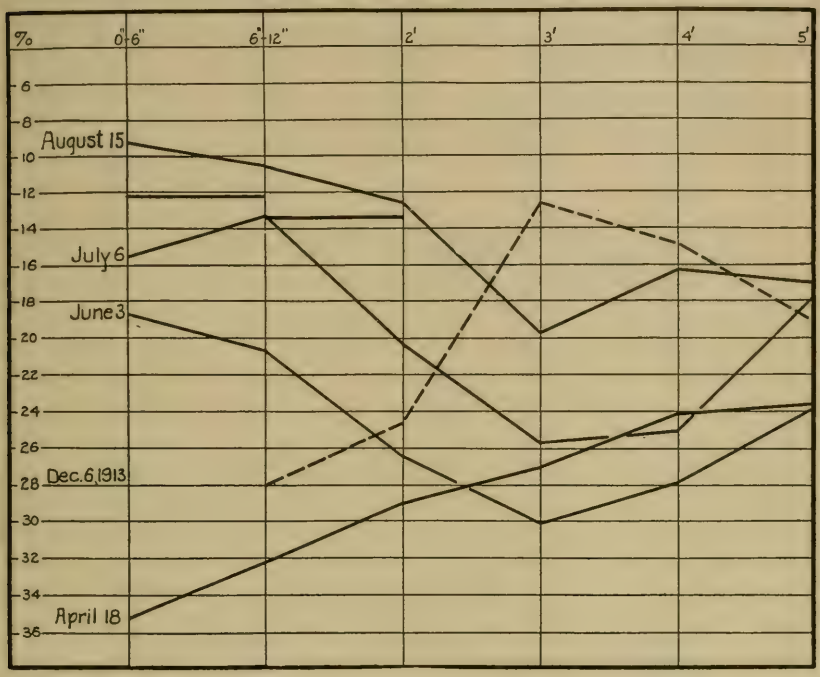


FIG. 14. Graphs showing the march of soil water to a depth of 5 feet on a northeast slope from April 18 to August 15, 1914, and the water content of the soil on December 6, 1913.

In order to further check these deep soil water conditions samples were again taken in duplicate on the northwest and south slopes of another prairie-covered hill. These findings, indicated in Table VI, check very closely with the preceding, and the striking difference between soil water content on the two hillsides at all depths is well shown.

It may also be noted that at each determination the soil at any depth was drier than at the same depth at the time of the preceding determination. On the south slope, it is interesting to note that without exception, the soil moisture increased with depth, and that the same condition maintains in most cases for north-side soils.

Thus it may be seen that topography with soil texture is the great middleman that distributes the soil moisture to fill the gigantic earthen reservoir, which again is largely emptied during the following growing season. The common farm practice in the Palouse Region of alternating season after season the growing of wheat with summer fallow, is a method of storing the moisture from one year for use in the growth of the next year's crop.

TABLE VI

THE MARCH OF SOIL WATER ON A NORTHWEST AND SOUTH SLOPE RESPECTIVELY. 1914

	May 22	July 6	August 15
0″– 6″ N.W.	23.4 %	15.2	11.6
S.	12.5	11.1	6.7
6″–12″ N.W.	25.7	13.7	12.1
S.	17.9	11.4	10.2
At 2′ N.W.	27.0	18.9	11.8
S.	19.9	12.6	10.2
At 3′ N.W.	30.2	23.7	14.4
S.	20.2	13.2	10.6
At 4′ N.W.	27.2	24.9	18.0
S.	22.0	17.3	10.5
At 5′ N.W.	24.3	21.3	19.5
S.	22.4	19.6	12.3

The differences in soil temperature on the two slopes and at various depths may be briefly noted here. Table VII gives the soil temperature at a depth of 3 inches on the two slopes respectively, for three representative days in July, 1914. The higher temperature prevailing on the south slope as well as the greater range in temperature is very marked.

TABLE VII

SOIL TEMPERATURE AT A DEPTH OF 3 INCHES

Station	Minimum	Time	Maximum	Time	Range	Day
		A. M.		P. M.		
N.E. slope	63.5° F.	5	75.0	3	11.5	July 27
S.W. slope	67.0	7	93.0	4	26.0	July 27
N.E. slope	59.0	5	71.5	3	11.5	July 28
S.W. slope	68.0	7	94.0	4	26.0	July 28
N.E. slope	61.0	5	73.5	3	12.5	July 29
S.W. slope	67.0	7	95.0	4	26.0	July 29

A comparison of a large number of temperature readings at one foot on the two slopes reveals the fact that at this depth the soils on the south slopes are from 3° to 5° F. warmer in early spring than those on the north slopes and that these differences may increase by late summer to 7°–10° F. In Table VIII the soil temperature from 1 to 5 feet on the two slopes at the base station is given.

TABLE VIII

SOIL TEMPERATURE AT 1–5 FEET ON APRIL 18 AND AUGUST 15, 1914, ON A NORTHEAST AND SOUTHWEST SLOPE, RESPECTIVELY

Depth	April 18		August 15	
	N.E.	S.W.	N.E.	S.W.
1 foot	45.7 °F.	50.3	65.0	73.0
2 feet	45.1	50.0	61.7	70.0
3 feet	45.0	48.2	58.0	66.2
4 feet	45.0	47.0	57.2	64.4
5 feet	45.0	46.4	54.5	62.6

The higher soil temperature prevailing on the south slopes has much to do with the earlier seasonal activities of many plants here than of those on north hillsides.

Summarizing briefly the habitat conditions in the prairie, we find the north and northeast slopes less xerophytic than the south and southwest slopes. This is due in part to actually greater precipitation caused by blowing snow, and in part to soil texture, which is more open, has more humus, and a greater water holding capacity. These factors are reflected in the greater amount of soil water and in lower temperatures. Likewise, these slopes are sheltered from the drying southwest winds, and from the perpendicular rays of the sun. This is reflected in slightly lower air temperature and greater humidity, and especially in the lower evaporating power of the air.

These differences in habitat are reflected in the vegetational cover in a number of ways. The resumption of growth in late March or early April is often from 10 to 17 days earlier on the warmer exposed slopes. Likewise, the same species flower and dry up correspondingly earlier than on the sheltered slopes. The vegetational cover is less dense on the exposed slopes, often 10 to

30 per cent. of the ground appearing bare by mid-summer. Closer investigation, however, reveals that much of this space was formerly occupied by prevernal and vernal plants which have by this time become dry and brown. However, relict xerophytic mosses and lichens indicate the more open nature of the ground cover.

A careful census of the plant population consisting of scores of list quadrats reveals striking differences, not only in the number of individuals, but also in the floristic distribution of species. On an average it was found that south slopes are clothed with about 115 individuals per square meter, while the north slopes, with only about 3 per cent. of unoccupied soil space, showed more than 200 individuals in the same unit area.

Perhaps the most pronounced difference is the smaller number or total absence of more mesophytic plant-forms which thrive in moist situations. *Erythronium grandiflorum, Trillium petiolatum, Capnorea villosula, Vaccinium caespitosum,* and *Viola adunca* are examples of species characteristic of moist north hillsides. Numerous species, such as *Sidalcea oregana, Circium foliosum, Valeriana edulis, Gentiana oregana,* and others seldom occur on south slopes.

The blue bunch-grass, *Festuca ovina ingrata,* ranking in importance with *Agropyron spicatum,* is the most characteristic grass of the region (Fig. 48). The slightly pale-green plants are densely tufted into bunches from 1 to 4 inches in diameter. The low, bushy, setaceous leaf blades scarcely exceed a height of 12 inches. It is not unusual to find as many as 10 to 13 of these bunches in a single square meter. The bunch habit, an aspect of prairie vegetation which is found more or less developed in practically all prairie regions, and one which has succeeded in a remarkable degree in withstanding xerophytic conditions, is most pronounced on the drier slopes. In moist situations the clumps are smaller, but I have never found *Festuca* producing rhizomes. Like the other prairie grasses *Festuca* flowers by the middle of June. Since its root-system draws the water supply from the upper 18 inches of soil, its drying out in July and resumption of growth upon the arrival of the autumn rains can easily be accounted for.

The June grass, *Poa sandbergii,* one of the pioneers of herbaceous vegetation in the moss consocies, is also perhaps one of the most important interstitial plants of the prairies. It grows in small tufts usually only about 0.5 to 1.5 inches in diameter but as many as 30 to 40 of these may occur in a single minor quadrat between the bunches of *Festuca* and *Agropyron.* It is called June grass because of its habit of flowering in May or early June and remaining dormant until the advent of the fall rains. This means of evading drought is necessitated by its very shallow root-system, which seldom exceeds 8 inches. Its xerophytic tendencies are shown by its less abundance in mesophytic situations.

The sod-forming habit of *Agropyron spicatum* in the prairies of eastern Washington is in marked contrast to its well developed bunch habit on the rim-rock or in the shallower and drier soils westward. I have found the soil quite filled with rhizomes of considerable length connecting smaller clumps of this grass. It may well abandon this marked xerophytic character, for its long roots extend into the fourth and fifth foot of soil, and tap the earthen reservoir far below the root limits of competing grass species.

Another common bunch-grass, which, with the three preceding, completes the list of dominant grass species, is *Koeleria cristata.* Like *Poa,* the bunches are often small, but numerous. It completes flowering in early July and remains dormant until revived by the autumn rains. Its well developed but short root-system gets water from the first 15 inches of soil only.

The entire absence of late blooming grasses, such as *Andropogon, Sorghastrum, Bouteloua,* and others of the prairie-plains region, may be accounted for by the peculiar distribution of the precipitation.

A most characteristic plant of the prairies, and one which for a time often outranks the grasses, is the prairie sunflower, *Balsamorhiza sagittata* (Fig. 42). Its abundance, size, and duration all unite to make it a very important ecological species. It is not unusual to find a dozen of these plants in an area of four square meters. Only on the steeper northeast slopes and moist valleys

is it absent. A medium-sized mature plant occupies an area of 4–5 square feet; it may have as many as 50–80 of the large sagittate leaves and a total transpiring surface of 30 square feet. From the short, thick, multicipital stem (I have counted 39 individual leafy shoots on a stem 9 inches in diameter) the new leaves appear in April. By the first of May the plant is often in full bloom. Then, with its large, yellow flowers, it is the most conspicuous object of the vernal aspect, which lasts until about June 1. After this

Fig. 15[a]. This and the two following figures (15[b] and 15[c]) are bisects showing the root and stem relations of important prairie plants. These figures were drawn from photographs and from data obtained by the excavation and examination of 325 root-systems of these eighteen species. *H, Hieracium scouleri. K, Koeleria cristata. B, Balsamorhiza sagittata. F, Festuca ovina ingrata. G, Geranium viscosissimum. P, Poa sandbergii. Ho, Hoorebekia racemosa. Po, Potentilla blaschkeana.*

the whole aërial part dries up, but the dead leaves are conspicuous throughout the year. It has a strong, woody tap-root, sometimes reaching a diameter of 4 inches, which may penetrate into the soil for a distance of 8 feet. Not only is it deep-rooted, but the extensive and wide-spreading laterals lay hold upon a very large area of soil.

In another place will be found a detailed report of a study of

the root-systems of many of the most important prairie plant species and it is there pointed out that the response of many of the plants to severe environmental conditions is met by well developed and extensive root-systems (17). Figs. 15*a*, 15*b*, and 15*c* show in part the results of these investigations as regards root type and depth of penetration.

Standing well above most other prairie vegetation and conspicuous not only for its size but also often for its great abundance is *Leptotaenia multifida*. This large, much branched, unbelliferous plant occurs quite commonly on both dry and moist

FIG. 15[b]. *S, Sieversia ciliata. W, Wyethia amplexicaulis. L. l, Lupinus leucophyllus. L. o, Lupinus ornatus. P, Poa sandbergii. L, Leptotaenia multifida. A, Agropyron spicatum.*

hillsides. It often characterizes rather large areas, but even if occurring sparsely it is nevertheless very conspicuous and especially in June, when, after flowering, the leaves turn yellow before drying up.

Erythronium grandiflorum constitutes a well-marked prevernal aspect society on moist north hillsides from early April to the first week in May. Even before the plants open their large golden

yellow blossoms, their great numbers, often more than 100 individuals in a square meter, give a distinct tone in contrast to the gray background of dead vegetation.

Later on by the blossoming of *Amelanchier, Crataegus, Prunus,* and *Rosa* especially, the developmental shrub community becomes very conspicuous. But the prairies become veritable flower gardens during the month of June. Then the large red

FIG. 15c. *Hu, Heuchera glabella. A, Astragalus arrectus. S, Sidalcea oregana. H, Helianthella douglasii. Ag, Agropyron spicatum.*

blossoms of *Geranium* and *Rosa* mingle with the yellow of *Potentilla, Gaillardia, Castilleja,* and *Helianthella. Senecio, Astragalus, Arnica,* and societies of *Wyethia* brighten the landscape with their yellow blossoms, while the tall, widely spaced, sentinel-like plants of *Cirsium foliosum* with their showy red flowers add pleasing variety.

Likewise the purple flowers of various lupines are conspicuous. *Lupinus wyethii* is only locally abundant. It is especially noticeable in the vernal aspect. It often covers areas of the driest hillsides and the whole aërial part dries up early. *Lupinus ornatus* is very cosmopolitan over the high prairies and is an important species. *Lupinus sericeus* is confined to the warmer

valleys southward and westward. Here its size and abundance make it an important floral component. *Lupinus leucophyllus* is the most mesophytic of the group and is found at home typically on moist north slopes or in the valleys.

In the lower ground considerable areas are given tone by the white flowers of *Galium*. But with the increasing stress of drought the aestival aspect passes, lingering only in moister situations. Then the leaden landscape of dry balsam-root, drying grasses, and silvery-leaved lupines and hawkweed is relieved only by the yellow and the blue of sparsely spaced goldenrods, asters, and *Hoorebekia*.

I have described very briefly the well developed prairie represented by the *Festuca* consociation. Westward and southward as the altitude decreases and the rainfall is correspondingly less, many important species either become fewer in individuals, or are found only in the most mesophytic situations, or indeed disappear entirely. Among these the following may be enumerated:

Astragalus arrectus
Carex geyeri
Cirsium foliosum
Drymocallis convallaria
Gaillardia aristata
Galium boreale
Geranium viscosissimum
Helianthella douglasii
Heuchera glabella
Hieracium scouleri
Hoorebekia racemosa
Leptotaenia multifida
Lithospermum ruderale
Potentilla blaschkeana
Rosa nutkana
Rosa pisocarpa
Sidalcea oregana
Sieversia ciliata
Symphoricarpos racemosus
Trillium petiolatum
Viola adunca
Wyethia amplexicaulis

The Agropyron Consociation

This community in an early stage of development covers hundreds of acres of the thin soil in the scab-lands. The characteristic plant is *Agropyron spicatum*. Areas characterized by this consociation are peculiar because of the growth form of the dominant species as well as a number of the commoner interstitials which show various degrees of the same bunch habit. Numerous

other plants are mat-formers, while a few are more or less shrubby in character.

The bunches of *Agropyron* are often 1–2 feet apart, perhaps only 2–5 occurring in a square meter (Fig. 47). The individual bunches or tufts are composed of from 100–350 or more stiff, erect stems, reaching a height of 2–3 feet. Several generations of dead stems are to be seen in these persistent bunches, the old leaves and culms forming a tangle at the bushy base. Consequently the landscape appears just as characteristic in late summer when this dominant is drying out as in the fall when it takes on renewed growth, or in early spring when a host of interstitials for a time cover the ground with a green carpet. *Agropyron* is the one grass best adapted for such situations. Its well developed roots penetrate the moist crevices in the underlying basalt to a depth of 4 or 5 feet.

Grasses like *Festuca ovina ingrata* and *Koeleria cristata* with rather short root-systems find this an uncongenial habitat. However, a few grasses with very short root-systems and an early blooming habit are very successful interstitials. Of these, *Poa sandbergii* and the low annual, *Festuca pacifica,* are by far the most important. Hundreds of individuals of the latter frequently occur in a single square meter. Mats of *Antennaria dimorpha* and dense growths of *Plantago purshii* are likewise common between the scattered bunches of the dominant. These interstitials, together with numerous others are quite as common in the preceding *Poa-Polygonum* associes of which this, indeed, except for the dominance of *Agropyron,* might be considered a late developmental stage. However, the presence of the rabbit brush, *Chrysothamnus nauseosus, C. viscidiflorus, Tetradymia canescens, Erigeron hispidissimus,* and various lupines, especially in pockets of deeper soil, indicates the developmental trend toward the more typical *Agropyron* community.

In the deep soils of the hills bordering the scab-lands the *Agropyron* consociation is better developed (Fig. 20). The appearance of *Festuca ovina* indicates more favorable life conditions. Indeed, the latter sometimes assumes equal importance with *Agropyron* on the more moist slopes. But the larger amount of

unoccupied soil surface, from 30 to 40 per cent., and the appearance of several new species of a decidedly xerophytic stamp gives this consocies quite a different physiognomy from the well developed prairies eastward. The following lists indicate the dominant, principal, and secondary species:

Composition of the Agropyron Consociation

Dominant Species

Agropyron spicatum

Principal Species

Achillea millefolium var. *lanulosa*
Chrysothamnus nauseosus
Chrysothamnus nauseosus graveolens
Chrysothamnus viscidiflorus
Festuca pacifica
Festuca ovina ingrata
Lupinus ornatus
Lupinus sericeus
Poa ampla
Poa sandbergii
Tetradymia canescens

Secondary Species

Agoseris heterophylla
Allium acuminatum
Alsine nitens
Antennaria dimorpha
Artemisia rigida[3]
Astragalus collinus
Astragalus spaldingii
Balsamorhiza sagittata
Carex filifolia
Cirsium undulatum
Clarkia pulchella
Cogswellia triternata
Elymus condensatus
Epilobium paniculatum
Erigeron corymbosus
Erigeron hispidissimus
Eriophyllum lanatum
Gilia pharnaceoides
Koeleria cristata
Lupinus wyethii
Madia exigua
Madia glomerata
Phlox longifolia
Plantago purshii
Potentilla biennis
Stipa comata

The rabbit brush, although more common westward, is an abundant and conspicuous component of the bunch-grass community.

[3] Relict.

Its shrubby growth-form, numerous, erect, fascicled, and dense, white-woolly branches and white-woolly leaves, combined with a greater height-growth than most of its associates, make it a conspicuous plant in the landscape. The non-woolly variety, *Chrysothamnus nauseosus graveolens*, not less conspicuous, is also very abundant. Both plants extend well up the warm valleys and canyons but are practically absent from the high prairies eastward.

Tetradymia canescens, with a growth form similar to the preceding half-shrubs, likewise lends a decidedly xerophytic tone to the dry scab-lands. It reaches its eastward extension in this region.

A plant which forms a rather distinct consocies is *Elymus condensatus.* On moist flood-plains this grass reaches a height of 3–5 feet. In such situations the stout stems are densely tufted and areas of many acres may be dominated by this species. In deep soils on the dry hillsides it is not infrequent, but here it usually occurs in more or less isolated clumps.

In the eastward extension of the *Agropyron* community along the rim-rock of the streams into higher altitudes, many of the species being confined to the warmer valleys, drop out. In such situations *Balsamorhiza sagittata* is often abundant between the bunches of *Agropyron.*

In conclusion it may be said that the plants of this consocies live typically not only in a climate of lower rainfall but also one in which the period of drought, owing to the warmer climate with a growing season several weeks earlier, is correspondingly increased as compared with that of the well developed prairies of the higher altitudes.

In the preceding pages I have treated the *Festuca* and *Agropyron* communities as climax units of vegetation. Without question, favorable changes of climatic conditions, such as a slight increase in rainfall, would cause an extension of the *Festuca* community into the area now occupied by the *Agropyron* consociation. The latter in turn would extend its area downward and westward into the desert scrub formation. Indeed, such movements of plant populations are easily traced in the new areas of rim-rock and scab-land where they are brought about as a result

of favorable modifications of the edaphic conditions such as an increase in amount or an increase of the water holding capacity of soils.

Likewise, on its high eastern border the *Festuca* consociation contains a potential shrub community. Almost everywhere *Symphoricarpos, Rosa,* and *Spiraea* are present but are held in check by competing herbs and grasses. A local disturbance of the habitat such as the building of a fence or the burrowing of squirrels modifies it favorably by increasing the water holding capacity of the soil and swings the balance in favor of the shrubs. Once established the shrubs may furnish a suitable nursery for seedlings of the yellow pine and thus the prairie may give way to forest. These modifications of edaphic conditions foreshadow those which would be caused by a favorable swing of climate, while the reverse of these conditions would follow an unfavorable change. Indeed, the balance between prairie, shrub, and forest is so nicely adjusted that even a few years of exceptionally dry or unusually wet weather would be recorded in the movements of the vegetation.

The seral stages of the *Agropyron-Festuca* association will next be considered, and in this place we shall discuss those of the xerosere only. This will be followed by a brief treatment of the desert scrub formation, after which the xerosere will be traced to its culmination in the climax cedar forest.

(See outline of vegetational units, page 19.)

LICHEN-MOSS COMMUNITIES

Where the basaltic rock is exposed along the canyon walls and in the scab-lands, as well as upon outcropping ledges of crystalline rocks on buttes and mountains, a flora of lichens and mosses abounds. During the dry summer months the rocks appear quite bare and devoid of vegetation, but upon the advent of the autumn rains, not only lichens and mosses, but also the June grass, which closely follows the latter in point of succession, takes on renewed growth. Then these situations, with their new verdure, become quite inviting. Three associes are easily distinguishable, of which that dominated by various crustose lichens is the pioneer.

Composition of the Rhizocarpon-Lecidea Associes

Dominant Species

Rhizocarpon geographicum *Lecidea lapicida*

Principal Species

Acarospora chlorophana *Lecidea fuscocinerea*
Blastenia ferruginea *Rinodina oreina*
Lecanora calcarea

Rhizocarpon geographicum is by far the most abundant and widely distributed species. It occupies the most exposed situations and forms a well defined consocies. The greenish-yellow color of the rocks is due to its presence. The characteristic checking of the dry thallus undoubtedly aids greatly in the absorption of water.

Lecidea lapicida often covers areas of several square inches exclusively. Like *Rhizocarpon* it is of sufficient abundance and importance to be ranked as an associes. On the quartzite rocks *Rinodina oreina* often replaces *Rhizocarpon,* dominating large areas with its orange-colored thallus. It is often accompanied by the cinnamon-brown *Lecidea fuscocinerea.* Further investigation will probably show these to be dominants of a distinct associes.

Often large areas of vertical cliffs of basalt appear as if painted lemon-color because of the presence of the crustose *Acarospora chlorophana.*

Crustose lichens not only exert an influence at the contact of thallus and rock, but the corroding effect of carbon dioxide and other secretions extends beyond the thallus margins during moist weather. This permits slow extension of the thalli or furnishes the starting place for new ones. Thus lichens corrode and decompose the rock and by mixing its particles with their own remains give opportunity for the growth of other vegetation. Centers of crustose thalli break up and folious lichens get in. Especially on the more weathered rocks and in slightly less exposed situations a number of foliose lichens replace crustose forms.

About the foliaceous species, water not only has a better chance to collect and be absorbed but evaporation is also less rapid. Indeed, it is probable that the change from crustose to foliose lichens is as great a change of habitat as happens anywhere in the sere, although too minute in extent to be impressive.

Gyrophora-Parmelia Associes

This community is in general less marked than the preceding and is characterized by the following foliose forms:

Dermatocarpon miniatum
Gyrophora phaca
Lecanora rubina
Parmelia conspersa
Parmelia pubescens

Gyrophora phaca may easily be found invading the areas of the preceding crustose forms and because of its growth-form actually causing them to disappear on account of decreased light. Thus it comes to dominate areas of greater or lesser extent. *Parmelia conspersa* takes possession of new areas in a similar manner. *Dermatocarpon miniatum* is characteristically found in situations where water seeps out of the rock ledges during a part of the year.

As soon as soil and humus begin to accumulate in the crevices and larger pores of the rock, the more xerophilous mosses begin to appear. The pores in the basalt vary from those microscopic in size to those several inches or even feet in diameter. On a single rock one may come across an infinite variety of stages from the dry exposed top of the rock with its crustose lichens to the creviced or roughened lower portions where foliose forms are mixed with mosses, grasses, and other flowering plants.

Grimmia-Tortula Associes

The moss of most common occurrence on the rocks and the one which is able to live in the most xerophytic situations is the black moss, *Grimmia montana*. This moss, with its minute rhizoids and power of withstanding desiccation, quickly follows the lichen stage and even precedes several species of the foliose lichens in point

of succession. Starting from the vantage ground of a crack or crevice, the small tufts collect wind-blown soil and lichen remains about them and building upon this substratum increase their area. Well-worn rocks are frequently covered with the black mats of the *Grimmia* consocies.

Less xerophytic but far more abundant is *Tortula ruralis.* Growing in places less dry than those occupied by *Grimmia,* it surrounds the base of rocky outcrops and occurs on thin stony soil where its soft cushiony mats may cover areas of many square meters. While *Tortula* is very abundant on basaltic ledges it is sometimes partly or wholly replaced, especially about quartzite rocks, by species of *Polytrichum,* especially *P. piliferum* and *P. juniperinum.*

In other situations, and especially on canyon walls with north and northeast exposure other mosses are abundant, often covering large areas of sheer rock surface or growing luxuriantly over the thin stony soil. The following lists include the most important of these together with a number of lichens which usually occur with the mosses. Some of these lichens are less xerophytic than the foliaceous forms already mentioned. Indeed, they are the most exacting members of the foliose lichen community.

Brachythecium albicans
Brachythecium erythrorrhizon
Camptothecium aeneum
Camptothecium lutescens
Ceratodon purpureus
Encalypta ciliata
Grimmia apocarpa
Mnium affine

Cladonia pyxidata
Diploschistes scruposus
Ochrolechia upsaliensis
Peltigera canina

Poa-Polygonum Associes

In the thin soil between the fragments of broken rock, an area over which *Tortula ruralis* and other mosses for a time have control, bunches of June grass and plants of *Polygonum majus* and *Plantago purshii* begin to appear (Fig. 18). Changes of light and root competition react unfavorably upon the mosses, while shallow-rooted plants are well adapted to dominate just

such areas. The broken rock fragments not only aid in the percolation of water and prevent run-off, but also tend to reduce evaporation.

The xerophytic character of *Poa sandbergii* has been discussed. *Polygonum majus* with its wiry stems and diminutive leaves answers well ecologically for a grass. Likewise, the linear-leaved, spiked, densely hairy *Plantago* may be so considered.

Polygonum majus must be a plant of very low water requirement for, in spite of its shallow roots, it blossoms and appears to thrive throughout the summer and fall in these stony soils. It is especially noticeable among the rocks when most other plants are dried out, and its abundance makes it showy notwithstanding its tiny flowers. I have counted more than 1,000 individual plants from 2–8 inches high in a single square meter. In deeper soils of talus slopes it becomes a bushy plant, sometimes more than a foot in height.

In the scab-lands especially, *Plantago purshii* characterizes large areas with its leaden color.

The following plant lists include those especially characteristic of this community:

Composition of the Poa-Polygonum Associes

Dominant Species (Consocies)

Plantago purshii	*Polygonum majus*
Poa sandbergii	

Principal Species

Antennaria dimorpha	*Eriogonum heracleoides*
Antennaria luzuloides	*Epilobium paniculatum*
Clarkia pulchella	*Festuca pacifica*
Cogswellia grayi	*Madia exigua*
Cogswellia gormani	*Madia glomerata*

Secondary Species

Agoseris heterophylla	*Allium acuminatum*
Agoseris grandiflora	*Alsine nitens*

Alyssum alyssoides
Arabis sparsiflora
Arabis holboellii
Athysanus pusillus
Bromus brizaeformis
Cogswellia macrocarpa
Draba verna
Eriogonum niveum
Eriogonum compositum
Festuca megalura
Platyspermum scapigerum
Ranunculus glaberrimus
Sedum douglasii
Selaginella wallacei
Tellima tenella
Tellima parviflora
Thysanocarpus curvipes

A number of the above species form more or less well developed socies. *Cogswellia gormani,* one of the earliest of prevernal plants, though inconspicuous as an individual, grows in such great numbers on the thin soils as to become quite prominent in early spring. When 500–800 of these plants occur in a square meter, as is often the case, with perhaps a third of them in blossom, they indeed make the landscape appear as if covered with "salt-and-pepper."

Cogswellia grayi is much more important than *C. gormani.* It covers large areas of rim-rock almost to the exclusion of other species. Its large umbels of yellow flowers make it very conspicuous.

Moist places on the thin soils are dominated for a time in early spring by great patches of *Ranunculus glaberrimus,* a small plant but one with large and showy flowers.

The *Poa-Polygonum* associes gives way to the community dominated by *Agropyron.* The chief cause for the transition is the accumulation of soil and the presence of rock crevices of sufficient depth and width to furnish soil and water for the deep-rooted bunch-grass. The early stage of the *Agropyron* consociation, already described, well illustrates this change. Often however, in the rim-rock throughout the less arid region, the transition is more abrupt. Belt transects only a few meters long often show zones of vegetation dominated by the characteristic species of the *Poa-Polygnum, Agropyron,* and *Festuca* communities respectively. These zones extend in a parallel manner along the upper edge of rocky outcrops. Below the transition

may be even more abrupt, a linear distance of one or two meters giving the necessary differences in soil depth. Consequently the zones are narrower, but no less distinct.

The uneven disintegration of canyon walls and scab-land and rocky butte ledges and the differences they offer in slope and exposure and in depth and moisture of soils furnish so many habitat conditions that perhaps two-thirds of the total flora find here more or less congenial homes. In the crevices of a lichen-covered rock and separated only a few inches from the lowly inhabitants of the former may thrive a shrubby member of a far more advanced community. An analysis of the habitat shows each is growing in its proper place, the crustose lichen on the bare rock, the shrub in a small area of rich, well moistened soil.

Striking differences are offered by habitats on sheltered and protected slopes. Near Pullman, during the summer of 1913, a station was maintained on a south slope in the *Agropyron* community and a second in a rather open growth of low shrubs on the opposite slope about half-way between the rock ledge and the flood-plain thicket. Not only was the evaporating power of the air found to be twice as great in the former situation, but the soil moisture was only about half as great throughout the growing season. Temperature differences were also striking. The soil between the bunches of *Agropyron* frequently gave noonday temperatures of 90° to 100° F., as compared with 70° F. at the opposite station.

These illustrations of diverse habitat conditions will make plain the fact that in addition to the plants already mentioned as belonging to the *Agropyron* or *Poa-Polygonum* communities, many others occur.

Characteristic shrubs and lianas found either as crevice plants on rocky talus slopes or forming thickets about springy places are enumerated in the following lists: the numerals indicate their relative importance. In the drier regions the shrubs are notably fewer.

Amelanchier florida 2
Amelanchier cusickii 1
Berberis repens 1
Clematis ligusticifolia 2

Crataegus columbiana 2
Opulaster pauciflorus 2
Philadelphus lewisii 1
Prunus demissa 1
Rhus glabra 2
Rhus toxicodendron 2
Ribes aureum 2
Ribes cereum 1
Ribes cognatum 2
Rosa nutkana 1
Rosa pisocarpa 2
Sambucus glauca 2
Spiraea corymbosa 2
Symphoricarpos racemosus 1

In springy places among the rocks, which are often surrounded by thickets, the following herbs are especially plentiful:

Alsine media
Cerastium vulgatum
Claytonia parviflora
Equisetum arvense
Equisetum hyemale robustum
Galium aparine
Galium asperrimum
Hydrophyllum capitatum
Mentha canadensis borealis
Mimulus langsdorfii
Saxifraga columbiana
Scutellaria angustifolia
Vagnera sessilifolia
Veronica americana

Among the most typical crevice plants other than those previously enumerated may be mentioned two ferns, *Cheilanthes gracillima* and *Woodsia oregana*. The former is especially characteristic of stony outcrops on the buttes and mountains. *Heuchera glabella* should also be mentioned here.

Other species peculiar to thin soils of rocky ledges are:

Amsinckia intermedia
Arabis holboellii
Crepis gracilis
Gilia aggregata
Phacelia heterophylla
Sisymbrium altissimum
Thalesia uniflora
Valerianella macrocera

The kaleidoscopic character of scab-land vegetation may well be anticipated by a glance at Fig. 39.

In the thin soil surrounding lichen- or moss-covered basalt may be found herbaceous plants characteristic of the *Poa-Polygonum* community. Or these may alternate with the shrubby growth of scab-land sage. In the crevices of the rocks may be seen

dwarfed bunches of *Agropyron* which is better developed on the talus slope below. This gives way in the deeper soils of the depressions or on protected slopes to various lupines, species of *Poa, Balsamorhiza, Hieracium, Gaillardia,* and other species. The depressions, if alkaline, may be clothed with dense growths of *Distichlis spicata, Spartina gracilis,* or *Poa brachyglossa* and these surrounded by a more or less distinct zone of *Elymus condensatus.*

The vegetational differences often occur in areas so local as to be seen at a single glance. Alternating with a talus slope of lichen-covered basaltic blocks and only a few feet away, may be seen other slopes which at a little distance appear well clothed with herbaceous vegetation. Such are the interesting situations offered by the rocky soils of canyons and scab-lands.

DESERT SCRUB FORMATION

In the region under investigation the above formation is represented only in the extreme western part. This formation occupies much of the Columbia Basin, extending eastward to an altitude of about 1,200–1,300 feet, and on southerly slopes much higher. Excepting such species as are confined to the moist ground along perennial streams, the great majority of plants are either shrubs or thick-rooted perennial herbs or short-lived annuals. The most conspicuous and ecologically important plant is *Artemisia tridentata.* Other dominant species are the rabbit brush, *Chrysothamnus nauseosus, C. viscidiflorus,* the scab-land sage, *Artemisia rigidia,* the antelope brush, locally known as the black sage, *Kunzia tridentata,* and, in alkaline situations, the greasewood, *Sarcobatus vermiculatus.*

The life conditions in this region are strikingly more severe than in the region of the high prairies eastward. During the summer of 1914, Mr. James G. Dickson, my one-time student, made determinations of water content, evaporating power of the air, and soil temperature for a period extending from July 5 to August 15, at Moxee, Washington, in the heart of this formation. He found that the average daily evaporation throughout the period from standard atmometers was 51 c.c., while during several days in August it reached 74 c.c. The soil moisture at 6 and 12

inches respectively, never exceeded 2.8 per cent., while that at a depth of 2 and 3 feet was only slightly higher. Conversely, the soil temperature at 3 inches ranged from 77° F. to over 112° F. Even at 12 inches the temperature was usually above 78° F.

The *Artemisia-Atriplex* association is represented in this region by the *Artemisia* consociation.

The Artemisia Consociation

This consociation, dominated by *Artemisia rigida,* is a very characteristic type of vegetation over large areas of scab-lands. The scab-lands, as elsewhere indicated, are areas of basalt, probably the flood-plains of former streams, in part, thinly covered with soil. These extend as long tongues over the branching system of river tributaries between the hilly divides. While many of these flats in this region are dominated by communities of *Agropyron* or *Poa-Polygonum,* still large areas are characterized by the scab-land sage. This perennial, low, scrubby growth is well adapted to the driest situations on the thin, rocky soil (Fig. 16). Many species typical of the above mentioned communities occur associated with the sage, as might be expected in this zone of transition. Plants characteristic of the desert scrub formation occurring with the sage are *Chrysothamnus nauseosus* including the variety *graveolens, C. viscidiflorus,* and *Tetradymia canescens.* It has already been pointed out that some of these play an important rôle in the *Agropyron* consociation.

In the Snake River Canyon beautiful examples of the abrupt transition from the sage to the *Agropyron* community are abundant. Rocky, exposed slopes reveal the former, while sheltered slopes only a few meters distant show a well developed *Agropyron* community.

In passing from the prairie into the scab-land the change in animal population is no less striking than that of the vegetation. In the drier region the Townsend squirrel, *Citellus townsendi,* replaces the larger Columbian squirrel, *C. columbianus,* so plentiful eastward. Likewise the presence of the burrowing owl and rattlesnake is characteristic.

The Sarcobatus Consocies

Communities of the greasewood, *Sarcobatus vermiculatus,* occur in alkaline soils of the flood plains or depressions in the scab-lands. This scrubby growth, with its pale branches and fleshy leaves, stands out in distinct contrast to surrounding vegetation. The consocies is represented only locally and careful study of it was not made.

THE PACIFIC COAST FOREST FORMATION

The coniferous woodland occurs in the eastern part of the region and chiefly in Idaho. While the forests in the main grow on the soils produced by the weathering of old crystalline rocks, it is not uncommon in certain parts of the region to find underlying rocks of basalt. Likewise, the sheltered slopes of isolated quartzite buttes may be clothed with trees, or woodland may extend as tongues along the deeper canyons far into the prairie.

There exists a close relation between the development of the physiography of a region and the life history of its forest communities. This is nowhere better shown than in semi-arid climates where a slight change in elevation may so modify the precipitation and other life conditions as to turn the balance slightly or wholly in favor of a tree form of vegetation.

A study of the chemical composition of the soils of basaltic origin as compared with those originating from quartzite, granite, and other crystallic rocks, shows that they are not greatly dissimilar (Table III). I am convinced that it is not the chemical composition of the soils of this region but rather their physical characters that determine the type of vegetation which they support. Of course the controlling factor of the physical composition is, in this region of dry summers, their ability to hold water, provided always that sufficient humus is present to furnish the necessary nitrates. Not only do these forest soils have a higher water holding capacity than those of the basaltic prairies, as has already been shown, but this property increases, due to increased humus content, proportionally as the succession advances toward the climax stage. That coniferous forests will grow upon the basaltic soils is evidenced by their presence over considerable areas in the

upper Palouse Valley, but the best example is to be found in the woodland growth of that high upfold of basalt in southeastern Washington known as the Blue Mountains. Under the present climatic conditions, the prairies appear to be a subclimax formation.

The higher elevation of these forest-clad foothills and mountains is sufficient to considerably increase the precipitation. The prevailing southwest winds sweeping across the many miles of open prairie and desert of northern Oregon and south central Washington, but gradually ascending, here lose much of their moisture. It is not unusual to observe on a morning in autumn or late spring the surrounding mountains covered with snow while no moisture has fallen upon the lower hills. Sometimes even isolated buttes only 700–1,000 feet higher than the lava plateau are snow clad and stand out in bold relief in contrast to the surrounding country.

A rain gauge of the government pattern placed with Mr. J. B. Kissinger 4 miles northeast of Viola, Idaho, showed, during the years 1912–1914, an annual increase over the rainfall at Pullman during the same period of 3 and 4.5 inches respectively. A similar gauge placed with Mr. Stratton on Cedar Mountain and at an elevation of about 4,000 feet gave 4 inches greater precipitation during the months of July and August, 1914, than was recorded at the base station. Not infrequently, I have witnessed rather heavy summer showers in the mountains while no rain fell upon the plateau 1,500 feet below.

Not only does the change in altitude affect the amount of precipitation, but it also shortens the growing season. Snow lies on the ground until late in May or indeed on the more protected slopes even until June. Thus the season of drought is considerably shortened. Likewise, the cool nights lessen the evaporating power of the air.

The forests of the region make up a part of the Pacific Coast forest formation. This formation is represented by the *Thuja-Tsuga* association. A single consociation, dominated by *Thuja plicata,* forms the climax community. *Tsuga heterophylla,* an

important member of the climax communities elsewhere, is not represented in the area under consideration.

Symphoricarpos-Opulaster Associes

A shrub community usually occupies the transition zone between prairie and forest or at least is intimately associated with the earlier stages of development of the latter. I have already mentioned that on the most mesophytic hillsides a more or less well developed scrubby mictium may compete with the grasses. These shrubs are even better developed on the protected slopes of the canyons, where seepage from the rocks may form a very congenial habitat, and where, indeed, they often entirely replace the prairie. Likewise, the sheltered sides of the lower buttes and the more exposed slopes of those of greater elvation may be covered with a rather dense chaparral. The presence of such a shrubby growth indicates increased soil moisture. This at first may be due to slight unevenness in the topography such as a ridge over which snow may be blown and accumulate in sufficient quantity to furnish considerable additional moisture, or, it may be due to biotic factors such as the loosening of the soil by squirrels and other burrowing animals. The water holding capacity of such worked-over areas is considerably increased and results in an immediate dominance of various shrubs, especially roses, *Symphoricarpos* or *Spiraea,* which show a much poorer development in the drier, compact soils. The shrubs once present tend to make conditions more mesophytic, a phase which constitutes their most important rôle in succession. Not only do their fallen leaves but also their decaying roots and rhizomes add considerable humus to the soil, while their shade lowers the rate of evaporation from the soil and at the same time prevents the too rapid oxidation of the decaying organic matter. Such enriched soil forms an excellent seed bed for species of xerophytic trees which may invade the sodded prairies only with difficulty. Thus in the normal succession the shrubs may prepare the way for tree growth. The trees in their turn, because of their shade, especially if they are in dense stands, cause the shrubs to disappear.

The Symphoricarpos-Rosa Mictium.—The members of this

community although present generally throughout the less xerophytic portion of the prairie region seldom come into dominance except on moist sheltered slopes or ravines. In such situations, dense tangles of shrubby growth consisting of the following species may occur:

Rosa nutkana	*Spiraea corymbosa*
Rosa gymnocarpa	*Vaccinium caespitosum*
Symphoricarpos racemosus	*Prunus demissa*

Here, as along sheltered canyon slopes, they may dominate local areas almost to the exclusion of grasses and herbaceous plants. They are frequently accompanied, especially in the latter situations, by dwarfed specimens of *Crataegus brevispina, Amelanchier* spp., or *Populus tremuloides.* Where pines occur the preceding trees and shrubs are invariably accompanied by *Opulaster pauciflorus*, the latter usually becoming the dominant shrub.

The roses are especially conspicuous in May, when their large showy blossoms fill the air with a delicate perfume. *Spiraea* is always less conspicuous, while *Symphoricarpos* is much more noticeable in the fall when it is covered with its large white fruits, than throughout its flowering period. *Vaccinium caespitosum* often covers large areas and while its reddish leaves may add tone to the vernal aspect, later, because of its low stature, it is more or less hidden by other vegetation.

Opulaster Consocies.—As already indicated *Opulaster pauciflorus* is the shrub par excellence of the scrub community. It often covers large areas in almost pure growth especially in the deeper canyons and on the outlying buttes. Its well developed rhizones enable it to invade the grass land which soon gives way because of the dense shade, if the shrubs are well developed. In most situations, the balance between chaparral and prairie is so nicely adjusted that for a long time the shrubs occupy places in swales, ravines, or other irregularities of the surface, while tongues of grass land extend down on the slightly higher elevations (Fig. 23). Among the last herbaceous plants to give way are those of the more mesophytic type such as *Geranium, Dry-*

mocallis, and *Sidalcea,* but not infrequently *Opulaster* grows in such situations as to replace the more xerophytic grasses and *Balsamorhiza.*

Chaparral that is so dense as to almost exclude other vegetation is characterized in early spring and before the leaves appear by a layer society of *Erythronium grandiflorum.* These lilies are often so numerous as to give the appearance of a yellow carpet under the shrubs. In less shaded areas *Ranunculus glaberrimus* and *Olsynium grandiflorum* are plentiful. The *Opulaster* consocies is very conspicuous in May, when its countless white blossoms give a distinct tone to the landscape. Likewise, in late August and September the reddish-tinted drying leaves form a pleasing variety to the monotonous brown of dry vegetation.

While *Opulaster* frequently characterizes considerable areas alone, it is not infrequently associated with the buckbrush, *Ceanothus sanguineus.* Indeed, the latter shrub may sometimes become so abundant as to make up half of the mictium. The buckbrush because of its oily seeds, is a very important and fattening food for sheep on the summer range. Numerous other shrubs, such as *Holodiscus discolor, Prunus emarginata,* and species of *Ribes* are less important components of this consocies.

Prunus Consocies.—Local areas on the buttes are often characterized by growths of *Prunus emarginata.* These vary from a rather open growth of stunted shrubs only three feet high to dense copses in which the cherry takes on the stature of a small tree. The characteristic occurrence of this community in dry open places is of considerable ecological significance. I have not infrequently found invading pines extending their territory from sheltered slopes into the drier areas under cover of these shrubs. Frequently the pines may be overtopping the cherries and indeed beginning to replace them, yet a count of annual rings usually shows that the latter were the pioneer woody plants.

Ceanothus Consocies.—On the exposed slopes of Cedar Mountain and adjacent buttes, but seldom found elsewhere in the region, the sticky laurel, *Ceanothus velutinus,* often dominates. This evergreen, semi-procumbent shrub, while seldom reaching a height of over 4–6 feet, has numerous long branches which spread

in all directions so that a single plant may cover an area of several square meters. It is frequently so abundant as to form a dense tangle very difficult to penetrate. Other common shrubs associating with it are *Ceanothus sanguineus, Pachistima myrsinitis, Salix scouleriana, Holodiscus discolor,* and *Spiraea corymbosa.* On these steep, gravelly slopes the rôle of the shrubs in catching surface washed materials including coniferous seeds which are frequently buried under the debris, and in shading the soil against excessive evaporation, is an important one in the establishment of the tree stage in succession. Of the forest trees, *Pinus ponderosa* and *Pseudotsuga mucronata* are most likely to be found in such situations.

The Pinus-Pseudotsuga Associes

Although much of the forest in this region has been cut over and still larger areas swept by forest fires, yet large tracts representing all the consocies and mictia of the region are still found in their primeval condition. This is due to the rough topography which makes them inaccessible to the lumberman, while certain areas have been set aside by the federal government as mineral lands.

The above associes represents types of forest which occupy the drier mountain slopes and are the transition stage from the grass land and shrub to the more mesophytic forest communities. Here are included the yellow pine and the Douglas fir consocies and a pine-fir mictium. The former is the earliest in point of succession and will be considered first.

Pinus Consocies.—Of all the forest trees of the region the yellow pine is best fitted for the pioneer work of foresting prairie, chaparral, or rocky areas. It overcomes xerophytic conditions in part by striking its root-system deeply and spreading it widely, thus laying hold upon large areas of soil. Rooted in rock crevices it may make a height growth of only a fraction of an inch a year and at the age of 40 or 50 years be only a few feet high, yet such examples bear witness to its wonderful powers of resisting adverse conditions.

The difficulties of pines in invading grass lands should be recog-

nized. Many of the seeds which are overlooked by rodent populations never germinate. Of those that do germinate many dry out before they have become well established. Other seeds are prevented from reaching the soil because of the sod. However, under a combination of favorable conditions a few seedlings become fairly established. Surface wash may lodge the seeds against a rock or bush or other obstacle and at the same time cover them with soil. Opportune showers may so favor their growth that they become well established. Having gained a permanent foothold they may reach maturity. These pioneer trees establish a more congenial habitat for their offspring. The fallen needles and branches catch more surface water and debris, and decaying, aid the grasses in increasing the humus content and consequent water holding capacity of the soil. Likewise, shading prevents the rapid oxidation of humus and at the same time lowers the evaporating power of the air. It is not unusual to find parent trees in prairie openings establishing about themselves just such areas of ecesis. In this way forests may replace prairies.

The invasion of pines into chaparral is accomplished with less difficulty, especially if the latter is of not too dense a growth. The shrubs not only modify the edaphic condition in a manner already indicated but also the aërial plant parts are greatly sheltered, especially from drying winds. I have noted scores of situations where shrubs were advancing up butte slopes into the prairie, while numerous pine trees of all sizes and ages had established themselves in the chaparral. However, the chaparral is often so dense as to prevent the establishment of the pines. This happens when the light under the shrubs falls to an intensity of 0.15. But usually, even in such situations, there are open places in which forest growth may occur provided tree seeds are present.

It is probable in this semi-arid region that during the more favorable years of a climatic cycle the forest trees are able to gain a foothold in situations where growth conditions would be too severe ordinarily. An investigation along this line would probably throw considerable light upon the puzzling problem of an isolated stretch of yellow pine in the canyon of Union Flat

Creek, at a distance of 12 miles from any contiguous body of timber. However, this is a phase of the problem which I found little time to study.

The yellow pine consocies forms the transition zone from prairie or shrub to other types of woodland. In the mountains it occupies exposed south or southwest slopes or only the tops of these if the lower slopes are sheltered. Not infrequently it is accompanied by Douglas fir.

On the exposed buttes only scattered trees may occur among the shrubs on north slopes. In other cases well developed forests may be found. On higher buttes, the rocky tops, ravines, and sheltered bases may be clothed with a pine forest, while large stumps, or isolated pines towering above the Douglas fir and tamarack now in possession of the moist, sheltered slopes, tell the story of a former occupation by a pine forest. Thus all stages of development are strikingly shown on these butte ramparts of the forest frontiers. Often on wind-swept ridges a sheltering spur permits the growth of pines, while a slight descent from a pine-clad ridge may reveal an entire change in tree dominants, the Douglas fir and tamarack replacing the pine.

As already indicated, the pines have worked their way down the Palouse River and along Rock Lake. In the shallow canyons they are practically confined to the sheltered canyon sides. Douglas fir and *Larix* accompany them in the deeper canyons of the Palouse River, but I have found only the former with the pine about Rock Lake. *Opulaster pauciflorus* invariably accompanies these forest outposts and its distribution is undoubtedly due to chipmunks and squirrels, which are likewise ever present in pine woods. Numerous plants, which otherwise are found only in the mountains also occur in these pine-clad canyons. Among others *Aconitum columbianum, Actaea spicata arguta, Thermopsis montana,* and *Veratrum viride* may be mentioned. In fact, the study of plant populations upon wooded buttes isolated by a distance of from only a few to several miles from the forests proper is fascinating and instructive, but one into which we can not well enter here.

The xerophytic conditions under which the pines grow about

Rock Lake are remarkable. Upon the thin soils which seem able to support only a *Poa-Polygonum* community and where even the bunch-grass seems dwarfed, pine seedlings establish themselves, rooting in the crevices, and eke out an existence for years. On the rocks in early August, everything is dry and burned. Even *Amelanchier,* cherry, and *Spiraea* become defoliated, still the pines hold on until relieved by the advent of autumn showers. Their stunted condition stands in marked contrast to their well developed companions in the more protected places with deeper soil.

In the open park-like growth of the yellow pine in the mountains it is not unusual to find fine clean-boled trees 2.5–3 feet in diameter towering above one or two younger generations. In other situations the forest is less open, and is then usually mixed with Douglas fir. In such situations, as one would expect in a transition region from prairie to forest, the ground cover is composed more largely of prairie than of forest forms. The following lists indicate the more important shrubs and herbs of open pine woods:

Amelanchier florida
Arctostaphylos uva-ursi
Ceanothus sanguineus
Holodiscus discolor
Opulaster pauciflorus
Pachistima myrsinites
Prunus emarginata
Rosa gymnocarpa
Rosa nutkana
Salix scouleriana
Spiraea corymbosa
Symphoricarpos racemosus
Vaccinium macrophyllum

Achillea millefolium lanulosa
Agropyron spicatum (including var. *inerme*)
Anemone piperi
Antennaria dimorpha
Antennaria luzuloides
Antennaria racemosa
Apocynum pumilum
Arnica cordifolia
Aster conspicuus
Astragalus mortoni
Bromus marginatus
Calamagrostis rubescens
Campanula rotundifolia
Deschampsia elongata
Deschampsia calycina
Drymocallis convallaria
Epilobium angustifolium

Erythronium grandiflorum
Fragaria bracteata
Fragaria platypetala
Frasera fastigiata
Galium spp.
Geranium viscosissimum
Helianthella douglasii
Hieracium albiflorum
Juncoides campestre
Leptotaenia multifida
Lupinus laxiflorus
Lupinus ornatus
Moehringia macrophylla
Pentstemon pinetorum
Potentilla blaschkeana
Pteridium aquilinum pubescens
Sedum douglasii

As the pine forest becomes more closed the shrubs tend to disappear, and usually considerable Douglas fir and tamarack are to be found. The transition from pine to the pine-Douglas mictium or Douglas-*Larix* mictium takes place in this manner. Not only has the closed pine forest established more congenial conditions for tree seedlings, but it has made its own reproduction difficult if not impossible by a cutting down of the light intensity. In order for yellow pine to thrive, the sun must strike the seedling the greater part of the day. Small openings in forests made by the removal of a few trees by windfall or natural death do not furnish sufficient light. However, the slightly more tolerant Douglas fir and tamarack can not only grow here, but actually shade out competing pine species. Thus the physiognomy of the forest may gradually change from pine to Douglas fir or to Douglas fir and tamarack with all intermediate combinations in mictium. Consequently, mixed forests of pine and Douglas fir into which *Larix* is invading are common. The shrubby and herbaceous flora, of course, is intermediate between that already given and that of the more mesophytic *Pseudotsuga-Larix* mictium to be described.

The Pseudotsuga Consocies.—Well developed communities of Douglas fir occupy the upper exposed slopes in the mountains. Frequently the stand is 90 per cent. or more pure Douglas fir but lower down the slopes it is almost invariably mixed with *Larix* and white fir, to which, along the ravines, it may almost entirely give way. Likewise, in more open places it is accompanied by yellow pine.

Where the growth is rather pure, the trees, a foot or more in diameter, are pruned high and the dense shade permits of a very sparse ground cover. In such situations, the light intensity may fall to 0.01 or even lower. Except for a few specimens of *Coptis occidentale, Anemone piperi, Mochringia macrophylla, Thalictrum occidentalis,* or *Vaccinium macrophyllum* the ground may be quite bare. Douglas fir grows only poorly at light values of 0.025. Such forests may completely surround bare rock-topped mountain peaks, but more often give way to shrubs or small areas of grass land. Except in such situations I have never seen Douglas fir invading prairie.

Douglas fir is far more common in mixture with *Larix* and white fir than in forests of which it is the dominant. The percentage of Douglas fir is usually determined by the slope and exposure and consequent soil moisture. While *Larix* and white fir do not grow in as dry soil as Douglas fir, the latter is less dominant in moister situations because of its greater light requirements. *Larix* is slightly, and white fir much more tolerant than Douglas fir.

The Larix-Abies Associes

This associes makes up by far the most important forests of the region. Great stretches of moist mountain slopes are covered with forests of which either *Larix* or *Abies* are dominant or more often the two form a mictium. The *Larix* consocies, dominated by *Larix occidentalis,* occupies the higher slopes of lower water content intergrading from the Douglas fir above to the more mesophytic white fir-cedar mixture of the moister slopes, ravines, and valleys.

It has already been pointed out that the larch is only slightly less xerophytic than the Douglas fir. Its place in the succession is intermediate between the Douglas fir and the white fir. Its ability to withstand the wind-storms that uproot white pine and white fir is an index of a well developed root system, and this probably accounts for its ability to grow in soils where the surface layers are quite dry.

The absence of *Larix* seedlings in a mature forest shows that

the young trees can not endure shade. However, openings of greater or lesser extent constantly occur in primeval forests due to the dropping out of old trees, to windfalls or to fires. Since *Larix* seedlings can do well in openings where the sunlight enters during the middle of the day, the chances for reproduction are always present. The tamarack, because of its thick bark, is distinctly a fire-resistant tree, often remaining unscathed where white pine and white fir are killed. Hence, large tracts of burned areas, where the tamarack was abundant, now appear to form nearly pure *Larix* communities. However, an examination of the new tree populations, together with comparisons with unburned contiguous areas, reveals the true mixed nature of the original forest. In such places the white fir is especially prominent.

Abies grandis is not only more tolerant of shade but is also more mesophytic than the larch. I have not infrequently found fir seedlings in shade so dense as to exclude all other trees except the cedar. White fir seedlings can grow in light as low as 0.02 to 0.015. Under such conditions, however, growth is poor. While it can develop in open places in rather dry soil, it is more exacting in soil moisture requirements than either Douglas fir or *Larix*.

The position of *Abies* in the normal succession is beautifully illustrated on sheltered slopes of outlying mountain spurs and buttes. Passing from the dry open pine forest one can find all stages from pine-Douglas fir mixture dominated first by the pine, to a pine-fir-tamarack mictium where the tall, spindly, bushy-topped pines, many of which are dead, tell the story of the lost struggle for light. Areas of higher water content on the same slope may show *Pseudotsuga-Larix* mixtures with the fir losing its dominance and *Abies grandis* appearing. The next stage is that of a *Larix-Abies* mictium with the coming in of cedar. Characteristic plants of these drier *Larix-Abies* forests are given in the following lists:

Ceanothus sanguineus	*Ribes viscosissimum*
Holodiscus discolor	*Rosa gymnocarpa*
Opulaster pauciflorus	*Rubus parviflorus*
Pachistima myrsinites	*Salix scouleriana*

Vaccinium macrophyllum
Anemone piperi
Arnica cordifolia
Calamagrostis rubescens
Chimaphila umbellata
Coptis occidentalis
Cytherea bulbosa
Fragaria bracteata
Fragaria platypetala
Linnaea borealis longiflora
Micromeria chamissonis
Pyrola picta
Thalictrum occidentale
Trillium ovatum
Vagnera amplexicaulis

While *Opulaster pauciflorus* is the most abundant undershrub in the pine consocies, in the *Larix-Abies* community it remains only as a relict. It is not unusual to find areas of dead ninebark under a growth of tamarack or white fir.

Ribes viscosissimum while occurring sparingly in the earlier stages of succession is frequent in these dry fir-tamarack forests but is a more typical undershrub of the more mesophytic fir-tamarack community. In the cedar consociation it gives way to the more mesophytic *Ribes lacustre.*

Likewise, *Arstostaphylos uva-ursi,* common in pine woods, is seldom found here. *Linnaea borealis longiflora* replaces it, covering large areas with a carpet of trailing stems. The twin-flower is less abundant in the deep shade of well developed fir-tamarack forests and drops out completely in the cedars.

In well developed forests the white fir not infrequently reaches a diameter of 2.5–3.5 feet, while neighboring tamarack trees reach diameters of similar proportions. Likewise, Douglas fir frequently attains a diameter of 3 feet, a relatively small tree compared with the dimensions it reaches in the humid Washington region west of the Cascades. Under the closed canopy of such a forest, shrubs are almost excluded and herbaceous plants are not abundant. The light values may drop to an intensity of only 0.01 or even 0.007.

In more open places a poorly developed shrubby layer may overtop an upper layer of herbaceous plants, which like the former is not well developed. Indeed, both may be absent and then a scattered growth of low-growing herbs with a few fungi and mosses may partially cover the ground. The sparse growth of

fungi as well as such saprophytes as *Corallorhiza* spp. and *Pterospora andromedea* appears meager indeed to one accustomed to the rich fungal flora of an eastern deciduous forest.

The following lists indicate the shrubs, herbs, and some fungi commonly found in well developed mesophytic forests:

Chimaphila umbellata
Lonicera utahensis
Menziesia ferruginea
Pachistima myrsinites
Pyrus sitchensis
Ribes viscosissimum
Ribes lacustre
Rosa pisocarpa
Rubus parviflorus
Sambucus melanocarpa
Vaccinium macrophyllum

Actaea spicata arguta
Adenocaulon bicolor
Anemone piperi
Arnica cordifolia
Asarum caudatum
Clintonia uniflora
Coptis occidentalis
Disporum majus
Fragaria spp.
Galium spp.
Linnaea borealis longiflora
Mitella stauropetala
Osmorhiza divaricata
Pyrola spp.
Streptopus majus
Thalictrum occidentale
Tiarella unifoliata
Trillium ovatum
Vagnera amplexicaulis

Boletus sp.
Clavaria spp.
Coprinus comatus
Gyromitra esculenta
Morchella bispora
Morchella spp.
Peziza spp.
Sarcosoma globosum

These changes in the shrubby and herbaceous populations from the less mesophytic to the more mesophytic members as the succession advances are no less characteristic than the changes in the lichen flora which abounds on the trees. While in open pine woodland the trees are often covered with the yellowish and grayish patches of *Letharia vulpina* and *Parmelia physodes,* in the early stages of the Douglas fir-tamarack community these lichens give way especially to species of *Alectoria.* Of these the long pendant thallus of *A. fremonti* is especially characteristic, while

A. oregana is less abundant. As conditions become more mesophytic in the *Larix-Abies* community, *Usnea dasypoga* begins to predominate, while in the climax cedar consociation the trees are often beautifully draped with the long yellow strands of this species. Under such conditions species of *Alectoria* are not frequent.

Other trees which are more or less important components of these forests are the white pine, *Pinus monticola,* lodgepole pine, *Pinus murrayana,* yew, *Taxus brevifolia,* and Engelmann spruce, *Picea engelmanni.*

The white pine, although more abundant and of greater value on the bottom lands of streams in northern Idaho than anywhere throughout its range, is not an important tree in the area under consideration. It occurs only sparingly throughout and where it is best developed on the moister slopes, seldom makes up more than 5 per cent. of the forest and reaches this abundance in only local areas. It appears to require a moister soil than white fir, but its seedlings can stand considerable shading. Perhaps the dryness of the climate combined with the ravages of forest fires which may kill it and leave larch and red fir uninjured, combined to make it an unsuccessful tree in this region.

The lodgepole pine, *Pinus murrayana,* occurs very sparingly throughout the western forest frontier of the region. Eastward and northward, especially in cut-over and burned-over regions, it assumes considerable importance, occurring in mixture throughout all types of forest, and frequently forming dense even stands over considerable areas. Unlike the yellow pine it seldom plays the rôle of pioneering in grass land and since it is distinctly a "fire tree" of a weedy nature, it had best be considered in another place.

Taxus brevifolia is very rare in this region, occurring only occasionally along ravines and then taking on only a scrubby form. Its rôle in the forests of the region is insignificant.

Engelmann spruce, so characteristic of high mountain slopes elsewhere, while never found in great abundance, is rather a frequent forest tree at the highest altitudes, especially in wet ravines and about the edges of alder swamps. It does best in soils where

the deeper strata are very moist. Outside of meso-hydrophytic situations it does not flourish in the region and even here it does not reach the usual size of the species. It sometimes forms a very broken and fragmentary zone between the alder-willow community and the climax cedar forest. Its ability to tolerate shade to a greater degree than Douglas fir or tamarack probably accounts for the presence of its seedlings in drier situations, for I have shown that conditions under typical stands of white fir and tamarack are, as regards the seedling stage, fairly mesophytic. Likewise, its power to germinate in the open, providing there is sufficient soil moisture, accounts for its presence, often in dense stands, in situations where drifts of melting snow keep the soil well moistened in otherwise apparently rather dry, rocky situations. Like other shade-enduring species, it makes a more rapid growth in these situations than in the shade.

The Thuja Consociation

The climax forest community of the region and the one in the xerosere with the lowest light intensity, greatest soil and air humidity as well as lowest temperature, is that dominated by the cedar, *Thuja plicata.* The best protected and most mesophytic mountain slopes as well as the well watered ravines are clothed with a growth of this cedar. These often form 90 per cent. or more pure stands and the trees may reach diameters of 3–5 feet. In such well developed forests, the light intensity ranges from 0.015 to 0.005 and even to 0.003, and except for the seedlings of the cedar the ground may be quite bare. But usually the forest canopy is sufficiently open to permit a growth of a few shade-enduring shrubs and numerous herbs. Of these the following are typical of the consociation:

Ribes lacustre	*Rubus parviflorus*
Aconitum columbianum	*Circaea pacifica*
Anemone piperi	*Claytonia asarifolia*
Asarum caudatum	*Clintonia uniflora*
Athyrium cyclosorum	*Coptis occidentalis*

Galium sp.
Streptopus majus
Tiarella unifoliata
Trillium ovatum
Viola glabella
Viola orbiculata
Vagnera amplexicaulis

The high humus content and consequent great water holding capacity of the soil is probably due in part to the lack of forest fires. For it is easy to see how the more moist areas in the deep ravines would be less subject to burning than the drier slopes with their proportionally greater amount of undershrubs. The forest floor supports the best developed fungus flora of the region. This includes species previously enumerated. However, even here the fungus flora is relatively scanty.

Because of the shade the trees are often pruned high, while the branches are draped with long strands of *Usnea*. Often at higher altitudes *Picea engelmanni* accompanies the cedar down the moist ravines but never assumes very great importance.

The greater mesophytism and tolerance of the white fir as contrasted with that of the tamarack and Douglas fir are shown by the presence of the former in the mixed cedar-white fir forest. It is the last of these trees to give way to the cedar, certain communities showing gigantic relict white firs while all of the saplings are those of the cedar. Proceeding up the slope from a cedar community the white firs become dominant as the cedars become smaller and less frequent on the drier soil, then a zone of white fir and tamarack is passed, while further up in this mixture Douglas fir becomes more abundant. Of course, the illustration is rather overdrawn for the accidents of windfalls, and especially fires, may often greatly alter these conditions.

The formation as a living developing entity has reached its maturity in the cedar consociation. Because of the low light intensity the establishment of the seedlings of the other forest trees of the region in the cedar community is impossible. Hence, the adult stage will go on indefinitely repeating itself generation after generation, unless disturbed by some outside factor as a forest fire or the hand of man.

Having traced the normal development of the forest through the

xerosere to its climax community, we will next consider briefly a hydrophytic adsere, after which we will take up the secondary succession or subsere.

The Adsere. Alnus-Salix Associes

Distinctly hydrophytic plant communities characterized by *Alnus sinuata, Salix scouleriana,* and *Pyrus sitchensis* occupy broad wet ravines and springy places often high up on the mountain sides. The weight of the great banks of snow which drift over the trees and sometimes almost bury them, pushes them into a semi-procumbent position leaning down the slope. The alder, which is usually dominant, reaches a diameter of 2–5 inches and a vertical height of only 12 or 15 feet, while not infrequently it attains a length greater than twice its height. Likewise, the willow and mountain ash and also the mountain maple, *Acer glabrum douglasii,* which accompany it in this habitat, are bent down the slopes by the weight of the snow. Because of the late melting of the snow in such situations and the resulting springy nature of the soil, coniferous tree seedlings are excluded. Engelmann spruce, as already indicated, often borders such alder thickets and in turn gives way to the cedar.

In this tangle of semi-prostrate trees, shrubs are nearly excluded, although *Sambucus melanocarpa* and *Ribes lacustre* occur rather infrequently. A dense herbaceous undergrowth which almost completely conceals the ground is made up of the following mesophytic species:

Aconitum columbianum
Actea spicata arguta
Athyrium cyclosorum
Circaea pacifica
Claytonia asarifolia
Clintonia uniflora
Disporum majus
Disporum oreganum
Mertensia membranacea
Osmorhiza divaricata
Senecio triangularis
Streptopus amplexifolius
Thalictrum occidentale
Trillium ovatum

The preceding plant species together with certain other mesophytic shrubs and herbs and hydrophytic mosses border the moun-

tain streams, which, indeed, may be fringed with a more or less fragmentary alder community.

SUBSERE. REFORESTATION OF CUT-OVER AREAS AND BURNS

Since the direction of development is always forward and toward the climax community of a region, the removal of the plant cover, such as a forest, makes possible the repetition of the story of normal succession. This, however, may be considerably modified and the amount of repetition determined by the degree of completeness of the destruction.

In studying the natural reforestation of the region, it will be advantageous to consider first the secondary succession or subsere after cutting, and afterwards the reëstablishment of forests following burns.

Naturally many of the outlying pine-covered areas were early cleared by the settlers and the land used for the cultivation of crops. Where small tracts have been allowed to "go back" after removing the yellow pine and burning the brush, the first years show a rapid growth of shrubs while the intervening spaces are dominated largely by prairie species. *Opulaster pauciflorus, Spiraea corymbosa* and other shrubs, which in the denser stands have been suppressed by the shade, spring rapidly into dominance, while *Epilobium angustifolium, Cirsium palousense, Pteridium aquilinum pubescens,* and *Deschampsia* spp. mingle with various prairie species already designated as occurring in yellow pine forests. Among these, yellow pine seedlings grow vigorously and the forest finally reëstablishes itself. Of course, repeated fires kill the pine seedlings, burn off the shrubs, and favor the invasion of prairie plants. Although prairie fires in the Palouse Region were never so severe as those of the Great Plains, it is probable that they played an important rôle in preventing the invasion of conifers into the grass land.

In most of the more accessible canyons of the mountains, lumbering has been carried on and in some places the operation of the lumberman has been followed by ground fires. In practically all cases, except in the lodgepole region eastward, where

reforestation has occurred, the new forest has usually about the same composition as the old. In these cases, the composition of the previous forest was determined, of course, by a study of the stumps, by checking with the adjacent forest, especially primeval forest areas on similar adjacent slopes. The following case, found by repeated trials to be rather typical, is illustrative.

Belt transects through a second growth forest occupying an area in Thatuna Hills cut over about twenty-five years ago gave the following percentage composition:

Moist North Slope		Dry South Slope	
Yellow pine	0.5 per cent.	Yellow pine	36.0 per cent.
Douglas fir	4.0 per cent.	Douglas fir	14.0 per cent.
Tamarack	30.0 per cent.	Tamarack	10.0 per cent.
White fir	26.0 per cent.	White fir	40.0 per cent.
Cedar	39.5 per cent.		

Superficially such moist slopes appear to be clothed with nearly a pure tamarack forest, due to the more rapid height-growth of this species. In such young forests the cedars are often small, in fact, many are mere seedlings. A count of the annual rings shows that they came in after the other trees had, by their shade, made conditions less xerophytic. Their importance in the general composition of the forest might be overestimated from their high percentage. Farther up the slopes they are scattering, and only near the moist base are they present in great abundance. Likewise, the white fir on the south slope occurs mostly in dense thickets near the base. On the open south slope trees averaged only 1 per square meter, while on the north slope the average was 3.5 per unit area.

No less characteristic of the two types of forests are the shrubs and herbs of the undergrowth. *Opulaster pauciflorus, Ceanothus velutinus,* and *Salix scouleriana* make up the chief shrubby growth on the south slope, often covering many square meters exclusively. On the north slope both *Opulaster pauciflorus* and *Ceanothus velutinus* occur but rarely, while *Vaccinium macrophyllum* is more abundant than *Salix scouleriana. Coptis occidentalis, Clintonia uniflora, Thalictrum occidentale, Mitella stauropetala,*

Galium sp., *Asarum caudatum, Anemone piperi, Pyrola bracteata, Cytherea bulbosa,* and species of *Vagnera,* all found here, are typical plants of the moister slopes, and contrast markedly with *Calamagrostis rubescens, Bromus marginatus, Pteridium aquilinum pubescens, Pentstemon pinetorum, Astragalus mortoni, Aster conspicuus, Anaphalis margaritacea occidentalis, Antennaria racemosa, Pedicularis racemosa,* and *Berberis repens,* found on the more open south mountain side.

Cut-over areas in the northeast part of the region, where as a result of fires lodgepole pine is frequently abundant, showed in addition to the usual herbaceous and shrubby growth and tree seedlings of all the common tree species, a frequent dominance of *Pinus murrayana.* The numerical dominance is a result of its prolific seeding habit, brush fires being sufficient to open many of the cones, while its rapid height-growth makes it stand out prominently when mixed with other species. The developmental history of such areas will be considered under reforestation of burns.

A report of the study of the natural reforestation of burned areas in the mountains of northern Idaho has already been made (6). Although much of the area there included lies outside of the boundaries of the present investigation, still conditions are so similar that a brief statement may be included here.

During the month of August, 1910, the greater part of northern Idaho and much of eastern Montana was swept by one of the most extensive and destructive forest fires ever experienced in that part of the country. In many heavily wooded canyons the draft was so violent during the fire and the heat so intense as to destroy every vestige of life above ground.

The town of St. Maries, Idaho, lies against the slopes of foothills, which, prior to 1910, were covered with a more or less mixed forest of coniferous trees comprising the following species: *Pseudotsuga mucronata,* in practically all situations; *Pinus ponderosa,* abundant on south slopes and in exposed and rocky situations; *Larix occidentalis* associated with *Abies grandis* and *Pseudotsuga; Pinus monticola* and *Thuja plicata* accompanied by indi-

viduals of *Pseudotsuga* and *Abies,* confined generally to the canyons and rich levels at the bases of north slopes.

These mountain slopes were overrun by fire on August 21 and 22, 1910. As they seemed to represent fairly the average forest conditions for northern Idaho, it was decided that here would be a most satisfactory place to carry on a study of the problem of natural reforestation.

Among the first pioneers to reclaim the unshaded and charred soil were *Funaria hygrometrica* and *Marchantia polymorpha. Cirsium palousense, Erigeron acris,* and *Epilobium angustifolium* were the chief herbs, whose wind-blown fruits afforded them an early entrance. Likewise, the numerous seedlings of *Salix scouleriana* may be accounted for in the same manner, while numerous others sprang up from the underground parts of the older willows characteristic of more open areas. The presence of *Opulaster pauciflorus, Arnica cordifolia,* and *Erythronium grandiflorum* may likewise be accounted for by the fact that the fire left unharmed the rootstocks of the shrub and of *Arnica* and the corms of the lily.

In the spring of 1911 and the second year after the fire, *Epilobium angustifolium* was predominant everywhere. The individuals varied from mere seedlings to plants 12–18 inches in height, often as many as 30 to 50 individuals occurring in a single square meter. Thousands of the smallest were succumbing to an epidemic of *Aecidium.* Next in importance to the fireweed was the thistle, *Circium palousense,* which with *Antennaria luzuloides* and the species enumerated as occurring the preceding year, formed a considerable herbaceous carpet over the burned area. Every inch of the ground otherwise unoccupied seemed covered with *Funaria hygrometrica.* The following shrubs, *Opulaster pauciflorus, Rosa gymnocarpa,* and *Rubus parviflorus,* which were more or less abundant, had, like several of the herbs in the following list, been able to survive the fire by means of underground propagative parts. The bulbs of *Zygadenus venenosus* and *Fritillaria lanceolata,* and the corms of *Erythronium grandiflorum,* all of which were present in considerable abundance, were found at depths of 5–7 inches below the surface of the soil. Other plants

present in greater or lesser abundance were *Potentilla* sp., *Mitella stauropetala* (abundant), *Leptotaenia multifida, Disporum majus, Moehringia macrophylla, Coptis occidentalis, Viola* spp., two species of *Lathyrus,* and *Vicia* sp.

It is of interest here to note that in spite of the terrific heat which must have prevailed over those mountain slopes, except where the undergrowth was dense, a considerable depth of humus remained intact. Where this was wholly consumed and the soil had been washed bare by rains there was a fairly complete turf of *Funaria* and *Marchantia* along with certain herbaceous plants already given. The effects of this forest fire were more profound in certain parts of the forest than in others, depending somewhat upon the topography of the devastated region. In the "draws" or small lateral canyons where growth conditions were such as to produce the most excellent stand of white pine, Douglas fir, white fir, and cedar, the fire was most destructive, leaving no trees alive. Whereas, on lateral or secondary ridges it was frequently observed that from 25 to 75 per cent. of these species, including yellow pine, survived the heat. These constituted the seed trees so valuable in the reforestation now going forward.

A diligent search was made for any seedlings of the cone-bearing trees characteristic of the region under observation, and a few were found. A limited number of these (all were *Larix occidentalis*) were from seed germinated in 1911, but the majority were but a few weeks old at the time of observation. They were indeed scarce—not more than 60–80 per acre on north and east slopes and none at all on south and southeast or southwest exposures. In two instances it was observed that as many as 15–20 seedlings were growing in one spot as though a cone had become planted and all its viable seeds had germinated. The area investigated seemed to show no signs of any other conifer, which fact corroborates observations of a similar nature made in certain denuded sections of Thatuna Hills. However, by the fall of the same year, many seedlings of *Thuja, Larix, Pseudotsuga,* and a few of *Abies* had sprung into existence.

It is probable that some of these seeds were furnished by scattered surviving parent trees in the vicinity, although it is

equally certain that others buried in the moister duff escaped burning. Hoffman (7) has shown that seeds of *Thuja plicata* may remain dormant in the soil for two years, while those of *Pinus monticola* and *Pseudotsuga mucronata* may be buried in the duff for six years and still remain viable.

The distribution of the seedlings was very irregular. In some areas of a square meter or more none could be found, while in other more favored spots the seedlings would average as many as 8 per square meter. The ground occupied by these seedlings was well covered with a mulch of the dead leaves and stems of such herbaceous plants as have already been described for the region.

On the denuded south slopes where the original forest growth consisted of an abundant stand of *Pinus ponderosa* with scattered individuals of *Pseudotsuga mucronata,* notwithstanding the presence of a growth of *Symphoricarpos, Pteridium, Epilobium, Cirsium, Achillea,* and other plants in considerable abundance and so intermingled as to form a semi-shaded protected area, no coniferous seedlings were present. Their absence was no doubt due to insufficient soil moisture and excessive evaporation.

These south mountain sides and their ravines and canyons will in the course of time be reclaimed by a new growth of yellow pine and Douglas fir unless ground fires occur and natural growth conditions are obliterated.

Reforestation studies in areas swept by fires of all degrees of severity were made, especially in Thatuna Hills. In some cases only very local areas were concerned, while in others the fires covered considerable territory (Fig. 43). In practically all cases sufficient seed trees were either left standing in the burned area or on unburned ridges in close proximity to furnish the seed for reforestation.

About twenty-nine years ago, many square miles of these hills were overrun by a fire which destroyed more or less completely much of the virgin timber, leaving here and there a few living trees representing the different species to serve as seed trees in subsequent years. These burns covered chiefly the north and northeast slopes of the mountains. In these mixed forests of

white fir, tamarack, Douglas fir, and cedar, the thick-barked tamarack suffered least, and often only the trees of this species less than 6–8 inches in diameter were killed. This gave rise to what are apparently nearly pure forests of tamarack; but in most cases sufficient seed trees of the other species were left to insure re-seeding, and at present a new generation of white fir and tamarack are especially prominent.

Notwithstanding the now open nature of the forest, the ground being covered with the blackened and charred remains of fallen white firs and cedars, many of the smaller tamaracks, though dead, are still standing. The larger ones, often fire scarred, but living, are not usually more than 12–14 inches in diameter. They reach a height of 85–100 feet, and, like the fir, reveal by their high pruning a former forest with a closed canopy.

On the upper and middle slopes the ground is more or less completely covered by a thin layer of raw humus, consisting mostly of the leaves of the tamarack. Numerous quadrats in various areas revealed a predominance of the seedlings of the white fir, often 20–25 per square meter, while Douglas fir and tamarack were less abundant. In many places the mineral soil was destitute of vegetation, while only a sparse growth represented by *Hieracium albiflorum, Clintonia uniflora, Adenocaulon bicolor, Galium* sp., *Chimaphila umbellata, Micromeria chamissonis, Pyrola picta,* and a few other scattered species occurred elsewhere.

The severe conditions under which the tree seedlings were growing were shown by the fact that even the oldest, which came in at least three or four years after the fire, did not exceed a height of 15–18 inches.

Judging from adjoining and unburned forests of a similar composition it appears that the remaining tamaracks by a spreading of their crowns had considerably increased the shade, the light value often falling to 0.2, and thus offering considerable protection to the tree seedlings.

Farther down on similar slopes, where the fire left fewer trees standing, both because fewer tamarack trees were present and because the fire was more severe, quite a different stage in reproduction is to be seen. Here, because of more moisture and the

open light, average major quadrats revealed as many as 200 tree seedlings. Of these nearly four-fifths were white fir and tamarack, about equally distributed, while the rest were Douglas fir, white and yellow pine. Many of these were 19–20 years old, with a height-growth of 6–13 feet, the tamarack as usual in the lead. In the moist ravines young cedars were abundant. The early history of this forest was probably the same as that of the St. Maries region already described.

In heavy burns in other parts of the region where big cedar, spruce, white fir, and tamarack timber have been completely destroyed, various species of shrubs, especially *Vaccinium macrophyllum, Menziesia ferruginea, Salix scouleriana,* and thickets of *Alnus, Rubus parviflorus, Ribes lacustre, Rubus macropetalus,* and maple had sprung up and almost completely covered with their dense growth the fire blackened tangle of fallen trees. However, they form a good protection for the tolerant cedar and spruce, and while they may shade out other seedlings for a time, still there are always openings, and especially in drier soil where the less tolerant but also the less exacting fir and larch can get a foothold.

Without further details the general story of reforestation of burns in the region is as folows: Soon after the fire the ground is more or less completely covered with cryptogamic vegetation of which *Funaria hygrometrica* and *Marchantia polymorpha* are dominant. Soon plants with wind-blown fruits appear. Of these the following are most important:

Epilobium spicatum
Salix scouleriana
Cirsium palousense
Erigeron acris
Hieracium albiflorus
Antennaria luzuloides
Anaphalis margaritaceae occidentalis

Certain grasses, as *Bromus marginatus,* and fire grass, *Agrostis hyemalis,* may predominate for a time but later give way to other herbaceous growths, especially of *Epilobium* (Fig. 44). After one or more years, varying with the severity of the burn and degree of exposure, tree seedlings begin to become established.

These may be shaded by too dense thickets of various shrubs, which may spring up from underground parts, and largely replace the herbaceous vegetation. But usually the shrubs form a protection against wind and excessive evaporation. The trees in turn suppress the shrubs and the mature forest, usually similar to the one preceding, is replaced.

Studies of reforestation in burns of varying severity show more or less incompletely the several stages of the subsere. However, continued investigation in these and in completely burned areas indicates the following seral stages, some of which may be telescoped or even lacking in any one particular burned area.

Salix-Vaccinium ASSOCIES
- *Vaccinium* consocies
- *Rubus* consocies
- *Salix* consocies

Epilobium-Cirsium ASSOCIES
- *Cirsium* consocies
- *Epilobium* consocies

Agrostis-Bromus ASSOCIES
- *Bromus* consocies
- *Agrostis* consocies

Funaria-Marchantia ASSOCIES
- *Marchantia* consocies
- *Funaria* consocies

There remains only to be considered briefly reproduction in the burns in the northeastern part of the area and especially along the Palouse River where the lodgepole pine plays a significant rôle. The wide range of the lodgepole habitat from very moist to very dry soil, its rapid growth and early reproduction as well as its inability to withstand fires or to endure shade are too well known to necessitate discussion here.

The forests of this part of the region, where lumbering operations have been going on for a long time and burns of all ages occur, are mixed throughout with lodgepole pine, the amount of which may vary from a few towering relict trees to nearly pure stands.

In case of a limited but severe burn in the midst of a mixed forest, provided a few lodgepole seed-trees are present, the following generation is usually predominated by the lodgepole pine. Provided the various tree seedlings have an equal start, the lodgepole, because of its more rapid height-growth, gains an ascendency over its neighbors. Likewise, by its habit of early reproduction (I have frequently found trees only seven years old bearing cones) it furnishes seeds for any unoccupied areas or for the entire area if seeds of other trees for any reason fail to be present. I have seen a few such areas dominated by lodgepole pine but comparatively they are not abundant.

But because of its early maturity and its inability to reproduce in its own shade, in spite of the advantage gained in the middle-aged forest, the lodgepole is the first tree to drop out of the mature forest. Unless aided by another fire before its competitors reproduce, it assumes a less and less important rôle. Indeed, in most of the forests it occurs only as scattered individuals, although, as previously stated, in areas cut and burned-over thirty to fifty years ago the lodgepole pine is not infrequently an important tree.

THE HYDROSERE

We shall now take up the development of the hydrosere. An outline of the vegetational units of this sere together with their relation to the xerosere may be found on page 19. Because of the peculiar topography of the region, combined with the arid climate, hydrophytic and meso-hydrophytic communities are not widely represented. However, along the streams and in small ponds and lakes, the latter occurring especially in the northwestern part of the region, the following communities are found. The three well marked associes of the water sere showing striking changes of habitat and life form as well as definite floristic differences, are those dominated by submerged, floating, and swamp plants respectively, in their successional sequence. The last stage is succeeded by a wet meadow community which is usually followed by a consociation of the *Agropyron-Festuca* association but may be replaced by the flood-plain forest associes.

The Chara-Potamogeton Associes

In shallow ponds and small clear streams it is not an unusual sight to find the water rather completely filled with various submerged plants, of which sometimes *Chara* and sometimes *Potamogeton pectinatus* or *P. californicus* are dominant. Perhaps there occurs more often a mictium of the dominants of the two consocies respectively.

In addition to *Vaucheria, Stigeoclonium,* and other algae, which are frequently very abundant in such situations, *Najas flexilis, Zannichellia palustris,* and *Batrachium aquatile,* also help make up the tangle of submerged plant life.

The water crowfoot shows great plasticity in its habitat requirements, and as the ponds become shallower it is not unusual to find it dominating considerable areas of muddy banks. The aerial leaves with their well developed blades appear in striking contrast to the filiform submerged ones.

The rôle of these submerged plants in the preparation of a suitable substratum for later stages in succession is frequently very marked. As a result of the dense aggregation of the individuals of the constituent species of this community, bodies of water often exhibit a pronounced accumulation of debris consisting for the most part of the remains of former generations of aquatic plants and animals but mixed with fine soil particles brought in by the action of wind and water, the whole being effectively held in position by the expanding tangle of living plants. The accumulation of humus decreases the total amount of water in the substratum and the habitat gradually approaches a little nearer the mesophytic. As the bottom of the pond is slowly raised by the accumulating debris, the substratum becomes relatively more compact.

A continuation of these processes reacts unfavorably upon the submerged plants and they thus prepare the way for their own elimination. Not only is the reaction of initial stages of succession unfavorable to the pioneer plant community but it also actually favors invaders. Plants with slender stems and floating leaves, such as *Potamogeton* and pond lilies, for a time take possession

of the shallowed water, while through the agency of further humus accumulation, a suitable foothold is eventually afforded for the development of cattails, sedges, rushes, and other members of the marsh community.

About the margins of shallow ponds and streams and often growing in shallow water are to be found *Mimulus langsdorfii, Veronica* spp., *Radicula* spp., *Ranunculus alismaefolius,* or *Steironema ciliatum.* If the ponds are larger, the shallower water near the margins is often dominated by plants of the following community:

The Nymphaea-Potamogeton Associes

Typically this associes is composed of plants rooted in the mud below but with a part or all of the leaves floating on the water surface. Their general position in the sequence of succession is following that of the submerged forms, whose reaction upon the habitat, as previously pointed out, is to shallow the water and thus make it less fit for themselves and more fit for the anchored floating forms.

The *Marsilea* community is well represented in certain small ponds but is most conspicuous in the rock pockets in the beds of streams during the dry season. The ability of *Marsilea vestita* to float on the surface of water of varying depth or to live rooted in the mud or even in rather dry soil fits it to occupy just such a changing habitat. However, it is far less important than members of the following consocies.

The *Potamogeton* consocies consists of various species of *Potamogeton* of which *P. americanus* often is dominant (Fig. 29). Frequently associated with it are the submerged *P. pectinatus* and *P. californicus.* In late summer ponds containing the latter species are sometimes margined for considerable distances from the shore with the broadly expanded leaves and the dense spikes of *P. americanus.* Associated with it are *Polygonum amphibium* and the duckweeds, *Lemna minor, L. trisulca,* and locally, *Spirodela polyrhiza.*

Other ponds and especially lagoons along the upper Palouse River are characterized by an abundance of *Nymphaea poly-*

sepala, whose broad leaves and pretty yellow flowers almost completely cover the water for many square meters (Fig. 30).

Additional floating-leaf aquatics are occasionally seen in mixture with the lily. The commonest of these are species of *Potamogeton* and *Alisma plantago-aquatica.*

Where the current is swift enough during a part of the year to keep the bottom relatively free from debris, the lily community may continue for years. But by continued humus accumulation and elevation of the bottom, the habitat becomes invaded more and more completely by plants of the marsh community and finally the lilies disappear entirely.

The Scirpus-Typha Associes

Like the preceding, the associes characterized by *Scirpus* and *Typha* is found covering only very limited areas considering the region as a whole. I have rarely seen the two dominants growing together, and, in fact, *Typha* is not abundant. However, observations on *Typha* in its limited habitat together with a study of its relict associates in shallow water show rather clearly its place in the succession.

The *Scirpus* consocies is more widely represented. The dominant species are the western tule, *Scirpus occidentalis,* and *Scirpus microcarpus.* While often growing in rather deep water about lake margins where they are sometimes associated with relict *Nymphaea* and *Potamogeton,* they likewise occupy boggy places, which in late summer may become mere mud flats (Fig. 31). Among the tall stems of the bulrushes is often revealed a distinct layer of *Alisma plantago-aquatica, Sagittaria arifolia,* and *Mentha canadensis borealis,* while among these various species of creeping buttercups may be seen.

Sometimes, as at Tule Lake, a slightly higher and consequently drier habitat gives a fine zonation of *Eleocharis palustris* and other members of the *Eleocharis-Carex* community. The presence of the latter among the tule in the drier portions of its area indicates the next stage of development.

The Eleocharis-Carex Associes

This plant community covers areas along the flood plains of smaller streams which are wet during the rainy season but often quite dry during the late summer months. Likewise, about the borders of lakes and springs it occupies situations of lower water content than those characterized by *Scirpus* or *Typha.*

The *Eleocharis* consocies is dominated by *E. palustris.* It sometimes covers considerable areas with a pure growth (Fig. 31). Its rhizomes form extensive mats which abound at the edge of ponds as well as in the shallow water. Associated with it is *E. acicularis.* It likewise has well developed and extensive rootstocks, while those of *E. acicularis bella* are very short so that the mats assume the form of dense round tufts. Because of its lesser height-growth the latter species is easily distinguishable from the former.

Frequently occurring in mixture with *Eleocharis* are various sedges and rushes of the following community.

The Carex-Juncus Mictium.—I have never seen in this region any considerable area dominated by one species of *Carex* or *Juncus.* However, a study of the fragmentary areas characterized by this community reveals the dominance of *Carex nebraskensis* and *Juncus balticus* locally. More often the following species occur in a puzzling mictium:

Carex lanuginosa
Carex monile pacifica
Carex nebraskensis
Carex pachystachya
Juncus balticus
Juncus bufonius
Juncus ensifolius
Juncus suksdorfii
Juncus tenuis

In addition to relicts of the preceding communities, associated with the above species are to be found numerous other plants of which the most important are *Beckmannia erucaeformis, Radicula curvisiliqua, Alopecurus californicus, Epilobium adenocaulon, Carex utriculata,* and *Mentha canadensis borealis.* The last-named plant is very important ecologically. It has well developed and extensive rhizomes. It not only thrives in very wet

situations but likewise occurs abundantly on the thin soil of the stony bottoms of intermittent streams.

The Wet Meadow Associes

The wet meadows occupy a zone lying intermediate in succession between the *Eleocharis-Carex* associes on the one hand and the more mesophytic type of prairie on the other. As would be anticipated, it shows all stages of the disappearance of relict members of the *Eleocharis-Carex* community which it frequently borders, as well as the invasion of the more mesophytic prairie species.

However, the community as a whole is well defined and is especially characterized by numerous socies. These wet meadows often occupy considerable areas, especially near the mountains, and under cultivation furnish an excellent yield of timothy.

Omitting relicts of earlier communities, and many species found typically on moist hillsides, the following list gives the principal wet meadow species:

Species Forming Distinct Socies.—

Deschampsia caespitosa
Hookera hyacinthina
Heracleum lanatum
Iris missouriensis
Polygonum bistortoides
Quamasia quamash
Ranunculus platyphyllus
Veratrum californicum
Wyethia amplexicaulis

Other Species.—

Calochortus nitidus
Carex aperta
Castilleja miniata
Cicuta occidentalis
Cogswellia triternata
Delphinium simplex
Epilobium adenocaulon
Equisetum spp.
Galium boreale
Hordeum nodosum
Hypericum scouleri
Lupinus leucophyllus
Mentha canadensis borealis
Orthocarpus tenuifolius
Poa annua
Poa triflora
Polygonum emersum
Polygonum polygaloides
Potentilla rectiformus
Prunella vulgaris lanceolata

Rumex mexicanus
Rumex occidentalis
Senecio serra
Sidalcea oregana
Steironema ciliatum
Trifolium douglasii
Zygadenus venenosus

In this region the associes is represented by a single consocies, namely that dominated by *Deschampsia caespitosa.* This characteristic grass with its densely tufted perennial stems, which often reach a height of over 3 feet, often occurs in nearly pure growth. In favorable situations, the clumps may reach a diameter of 9 inches.

The *Quamasia* socies is well marked in the early spring when large areas in the wet meadows are characterized by the dark blue flowers of *Quamasia quamash* (Fig. 32). These scapose plants, reaching a height of 2–2.5 feet, are terminated by elongated racemose clusters of as many as 30 large, blue flowers. The individuals frequently occur as abundantly as 35–45 in a square meter. The edible bulbs, which are nearly an inch in diameter and buried only 4 inches in the soil, are a favorite food of the Indians.

Heracleum lanatum, the cow parsnip, is very abundant in wet meadows along streams (Fig. 34). It not only reaches far above other herbaceous vegetation, but its large size and numerous, large, white-flowered umbels, which bloom for weeks, make this socies a very conspicuous one for the major part of the growing season.

Wet meadows in early spring are characterized by the great abundance of *Ranunculus platyphyllus.* Its great numbers, combined with its profuse flowering habit, makes this socies one of the most important of the vernal period. The plant has rather a bushy habit. Growing about 2 feet high, it often spreads at the top over a diameter of 3 or more square feet. The golden yellow flowers are 2.5 centimeters in diameter.

Many parts of the wet meadows are dominated by large areas of *Iris missouriensis.* The growth habit of this cosmopolitan species is too well known to need further comment here (Fig. 33).

The black sunflower, *Wyethia amplexicaulis,* often found in rather dry prairies, is typically at home in the wet meadows.

Often the gregarious growths almost exclude other plants. Its large, dark-green, shiny, resinous leaves, more than a foot long and as many as 20 on a single individual, are no less characteristic than its numerous, large yellow flowers. A single plant may occupy an area of more than 2 square feet although 20–30 plants often occur in a single quadrat. It possesses a strong tap root, 5–9 inches in circumference, which may penetrate the soil to a depth of over 6 feet.

The wet meadow is gradually replaced upon its higher lying borders by typical prairie species.

It should be mentioned in this place that in the drier regions large areas of low-lying ground are dominated by dense growths of rye-grasses, especially *Elymus condensatus*. In low ground such as dried basins of shallow ponds and where the soil is alkaline, socies of salt grass, *Distichilis spicata,* or of *Spartina gracilis* are to be found.

The Flood-plain Forest Associes

The flood-plains along the streams, because of the seasonal distribution of the precipitation, are peculiarly apt to be subjected to periodical submergence. Growing in these rich, well-watered, alluvial soils are to be found dense thickets of various trees and shrubs and occasional groves of poplars and aspens. Since the larger streams soon cut canyons into the basalt, the flood-plains are usually not extensive and the zone of tree growth is often limited, especially westward, to a mere fringe along the bank of the streams (Fig. 35). Likewise many of the smaller streams are intermittent and along these thickets of woody species are few or entirely absent. A close relationship exists between the protection from wind, afforded flood-plain areas by canyon walls and hills, and the presence or absence of trees and shrubs.

Although these flood-plain species usually occur in various mictia, however, two communities are rather well defined—the *Populus consocies* and the *Salix-Crataegus mictium.*

The Populus Consocies.—Small groves of poplars consisting of *Populus tremuloides,* or more rarely of *Populus trichocarpa* are frequent along the flood plains, especially in the less arid parts

of the region. These usually occur in situations where the stream has a double channel or where, having abandoned one channel, it has built up a rich alluvial flat. It is quite clear how after a spring flood the wind-blown seeds of the poplars find excellent conditions for germination in such situations and even if only a few become established the extensive underground parts of *Populus tremuloides* would soon increase the area dominated by trees. In this manner the trembling aspen frequently extends its territory beyond the flood-plain onto the moist, sheltered banks of canyons. I have observed one or two cases in the deeper canyons where yellow pines had established themselves among the aspens, and seemed to be replacing them.

The Salix-Crataegus Mictium.—Much larger areas of the flood-plains are dominated by shrubs or trees of the following species; these may occur singly, but more often form a mictium.

Alnus tenuifolia
Amelanchier florida
Crataegus brevispina
Prunus demissa
Salix argophylla
Salix bebbiana
Salix cordata
Salix exigua
Salix scouleriana

In addition to the above dominants numerous secondary tree species and several important undershrubs should be mentioned here. The following are the most important:

Alnus rhombifolia
Amelanchier cusickii
Betula microphylla
Cornus stolonifera
Crataegus columbiana piperi
Rosa nutkana
Rosa pisocarpa
Ribes aureum
Salix bella
Salix lasiandra caudata
Salix pyrifolia

The alder sometimes becomes so abundant locally as to constitute perhaps half of the flood-plain woody vegetation. The chokecherry is never so abundant.

Of the willows, only one, *Salix lasiandra caudata,* assumes the proportions of a tree. As might be anticipated, the willows are usually among the first species to appear.

Crataegus brevispina and *Amelanchier florida* form dense thickets, sometimes singly, but more often in mictium. Frequently these copses are so dense as to exclude all other vegetation. In the month of May when these trees are clothed with their profuse white blossoms the flood-plains are indeed a beautiful sight. Even in winter the woodland growth along the streams, as they wind their way among the treeless hills, lends pleasing variety to the monotonous landscape.

RUDERAL VEGETATION

There are a number of plants that are regularly found in and about waste places. To this number may be added others that are regular members of certain of the preceding plant communities which now and then reveal a decidedly ruderal tendency. The following list includes the commoner plants of this nature:

RUDERAL SPECIES

Amaranthus blitoides
Amaranthus graecizans
Amaranthus retroflexus
Amsinckia intermedia
Anthemis cotula
Arctium lappa
Artemisia atomifera
Artemisia gnaphalodes
Bromus brizaeformis
Chenopodium botrys
Chenopodium album
Cirsium lanceolatum
Collinsia tenella
Dipsacus sylvestris
Erigeron canadensis
Erodium cicutarium
Geranium pusillum
Madia glomerata
Marrubium vulgare
Matricaria matricarioides
Polygonum aviculare
Salsola kali tenuifolia
Sanguisorba annua
Sisymbrium altissimum
Vaccaria vaccaria
Verbascum thapsus

Because of the practice of alternating a crop of wheat with summer fallow nearly half of the farmed area is laid bare each year for the invasion of ruderals. *Amaranthus graecizans* and *A. retroflexus* are the dominant weeds of these fallow fields. Unless the ground is frequently tilled these grow in great abundance, the former breaking loose near the surface of the soil in

the fall of the year and tumbling over the ground, is piled by the wind into great heaps on the leeward slopes of the hills.

Westward, in the drier regions, and especially in the scab-lands, *Sisymbrium altissimum,* locally known as Jim Hill mustard, from its introduction along the right of way of the railroads, is present to a degree almost unbelievable. Hundreds of acres in the scab-lands are literally "taken" by this weed. From dwarfed specimens a few centimeters high on the scab-rock, it ranges to rank growths in the moist soil. It is a bad weed in the wheat fields throughout the greater part of the region.

The tar weed, *Amsinckia intermedia,* is likewise a troublesome weed along roadsides and especially in wheat fields. South of Snake River it is very abundant. Its dense coat of long bristly hairs upon drying becomes extremely annoying to both men and horses.

Westward and especially in the slightly alkali regions the Russian thistle, *Salsola kali tenuifolia,* and the Australian salt bush, *Atriplex semibaccata,* are often abundant.

Dipsacus sylvestris, introduced a number of years ago, has spread very rapidly and in many localities assumes the rôle of a very thrifty and very obnoxious weed.

The little geranium, *Erodium cicutarium,* is an introduced weed which has become very common in gardens, feed lots, and waste places. Often associated with it are *Sanguisorba annua, Geranium pusillum,* and *Verbascum thapsus.*

Common roadside weeds of especial abundance are *Madia glomerata, Marrubium vulgare,* and the rattle grass, *Bromus brizaeformis.* The absence of most roadside weeds so common in the eastern and central states is very characteristic.

About the numerous grain-loading stations throughout the region many ruderals are gaining a foothold. Here the cars are swept out and the seeds of various plant species scattered. Among other weeds thus recently introduced, and which I have seldom seen elsewhere, may be mentioned *Ambrosia trifida, A. psilostachya, Melilotus alba, M. officinalis, Cirsium arvense, Iva xanthifolia, Datura tatula,* and *Datura stramonium.* The problem of grain warehouses as centers of weed distribution would

form in itself an intensely interesting and very practical field of investigation.

CONCLUSION

In the foregoing pages it has been shown that in this region lying in southeastern Washington and adjacent Idaho, three plant formations occur. In the western part of the region, that of least elevation and consequently of lowest precipitation, the desert scrub formation occurs. As the altitude becomes greater and the climatic conditions more favorable eastward, the desert scrub gives way to the grass land of the prairie-plains formation. In its early development this grass land is of a very open bunch-grass type, with much of the ground being either destitute of vegetation or carpeted with interstitial plants only in early spring. As conditions become less xerophytic at higher altitudes the ground becomes rather completely occupied by grasses, some of which are sod-formers, and by non-grassy herbaceous vegetation which shows a great increase both in the number of species and in the number of individuals per unit area. The best developed prairies reveal a potential shrub community which, while held in check usually by competition with prairie plants, develops in the eastern edge of the grass lands and especially upon the non-basaltic soils into thickets of chaparral. Under cover of the chaparral, the yellow pine, a pioneer community in the development of the Pacific Coast forests, often becomes established. The pine may be replaced by Douglas fir and tamarack, and these in turn by mixed communities dominated by tamarack and white fir, or by white fir and cedar. Finally, in the most mesophytic areas the cedar community reveals the climax stage in the development of the Pacific Coast forest formation.

It has been shown that the desert scrub formation is characterized by soils with lower water content and higher temperature, and with higher evaporating power of the air than any of the other plant communities. Likewise, there has also been found to exist in the several plant communities of the xerosere, from the bunch-grass community of the prairies to the climax cedar community of the forest, a direct relation between the water content

of the soil, the temperature of the soil and the evaporating power of the air, and progressive stages in succession. The water content of the soil has been found to vary directly with the stages of the sere from a minimum in the bunch-grass stage to a maximum in the cedar community. Conversely, the soil temperature and the evaporating power of the air have been shown to decrease directly in proportion to the advancement of the stage of development of the sere.

In the forest communities the light values decrease progressively as the climax community is approached.

In addition to the xerosere, beginning with lichens and mosses on the bare rocks of basalt, granite, or quartzite and ending ultimately in the climax forest community, we have also traced the stages of the subsere in the reëstablishment of cut-over or burned-over forested areas. We have seen how these more or less denuded areas may finally come to support the same type of vegetation that characterized them before the disturbance of their normal development.

Lastly, we have considered the hydrosere. The communities of this sere, although occupying a relatively small area geographically, show distinct stages from the submerged, floating and swamp communities to that of the wet meadow. The latter is usually replaced by a xerophytic grass land community, or infrequently by a deciduous flood-plain forest.

In concluding this report on the study of the vegetation of southeastern Washington and adjacent Idaho, the writer wishes to state that perhaps no one feels more keenly than he the necessarily preliminary nature of the work accomplished.

The Snake River Canyon alone, with its peculiarly dry, mild climate stands in marked contrast to the colder, more humid area above, and forms a rich field for detailed ecological investigation. Not infrequently has the writer spent days in late February or early March among the abundant prevernal flora of the canyon, while weeks later most of the same species came into blossom on the plateau above, while yet another period elapsed before the awakening of the same species on butte and mountain prairies.

During the progress of this study a number of plant species

not reported for the region were encountered. Among these the occurrence of the devil's club, *Echinopanax horridum,* along certain streams in Thatuna Hills, is especially interesting. Many of the species new to the region are ruderals. Other plants like *Crataegus columbiana piperi,* heretofore known to occur only in Washington, were also repeatedly found in Idaho.

It is hoped that the results of the present research may form a basis for further investigation of the ecological problems of this and adjoining regions.

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FIG. 16. Typical view in the sagebrush community. The chief plant is the scab-land sage, *Artemisia rigida*. The hills in the background are covered with bunch-grass.

FIG. 17. A glimpse of the lichen-moss community. The black mats are *Grimmia montana*. Surrounding the base of the rocks and extending along the deeper crevices are patches of *Tortula* into which the June grass is invading.

FIG. 18. June grass and knotgrass on thin rocky soil. Note the bunch-grass occupying the deeper soil in the background.

FIG. 19. A typical bunch-grass community. Much of the soil surface is unoccupied.

FIG. 20. A hillside in Garfield County clothed with plants of the *Agropyron* consociation. Typical representation of the drier type of prairie.

FIG. 21. *Festuca* consociation in eastern Whitman County; representative of the less xerophytic type of prairie.

FIG. 22. Minor quadrat in the *Festuca* consociation. The conspicuous plants are *Balsamorhiza sagittata, Hieracium scouleri,* and *Festuca ovina ingrata.*

FIG. 23. Yellow pines invading a protected north slope under cover of the ninebark, *Opulaster pauciflorus.* The exposed south slope is covered with prairie, tongues of which extend down the dry ridges shown in the picture.

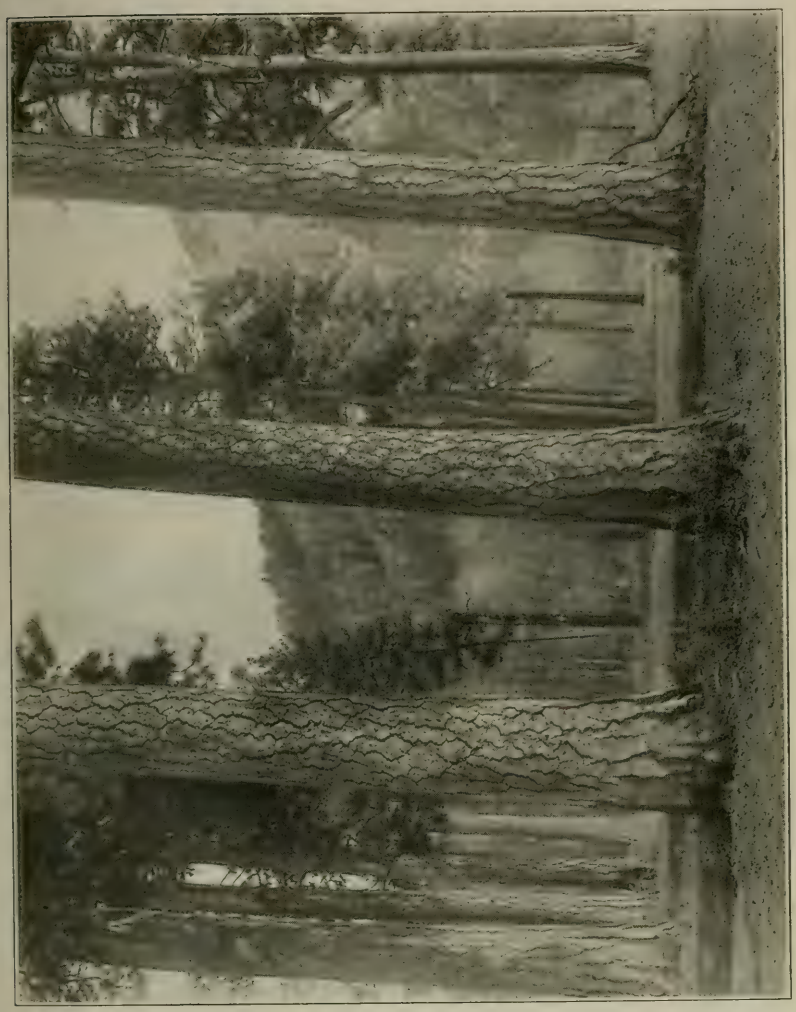

FIG. 24. Yellow pines in a ravine and on an exposed slope. Note the open park-like growth.

Fig. 25. Douglas fir and yellow pine on an exposed rocky slope in the mountains.

Fig. 26. A mixed forest of Douglas fir, tamarack, and white fir.

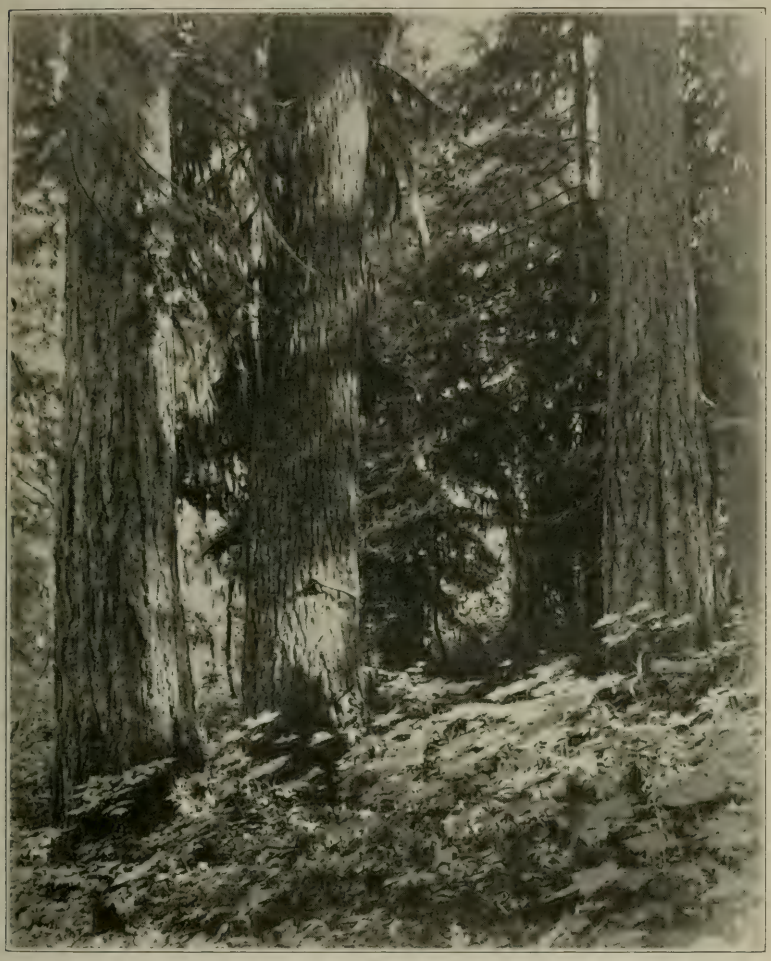

FIG. 27. A glimpse into a primeval forest of *Larix, Abies,* and *Thuja.*

FIG. 28. Climax *Thuja* consociation. In such situations the light is too low to permit the growth of tree seedlings other than the cedar.

FIG. 29. *Potamogeton* consocies in Silver Lake. The chief species is *Potamogeton americanus*. Willows fringe the margin of the lake.

FIG. 30. A consocies of *Nymphaea* in a lagoon of the Palouse River.

FIG. 31. View near Rock Lake showing zonation of *Eleocharis palustris* (foreground) and *Scirpus microcarpus*. In the background are flood-plain trees of willow, hawthorne, and *Amelanchier*.

FIG. 32. A wet meadow socies of *Quamasia quamash.*

FIG. 33. A socies of *Iris missouriensis.*

FIG. 34. *Heracleum lanatum* and *Crataegus brevispina* in a wet meadow.

FIG. 35. A view of the flood-plain trees along Rock Creek in western Whitman County. The chief trees are *Betula microphylla, Crataegus brevispina,* and species of *Salix.*

FIG. 36. A view of Kamiak Mountain looking northward from Smoot Hill. Note the fringe of pines near the summit of the exposed south slope.

FIG. 37. The north slope of Kamiak Mountain. It is covered with a second-growth forest of Douglas fir and tamarack.

Fig. 38. A bit of skyline at Pullman, Washington, showing the rounded, flowing outlines of the dune-like topography.

Fig. 39. A view in the scab-lands in eastern Adams County. A distance of a few feet may show a change of vegetation from the lichens and mosses on the rocks to the June grass—knot-grass or sagebrush communities. Likewise, the bunch-grass and balsam-root of the drier soil gives way to more mesophytic species in the depressions.

Fig. 40. A family of knot-grass invading a newly formed talus slope.

FIG. 41. Base station in the *Festuca* consociation near Pullman, Wash.

FIG. 42. A single plant of *Balsamorhiza sagittata.*

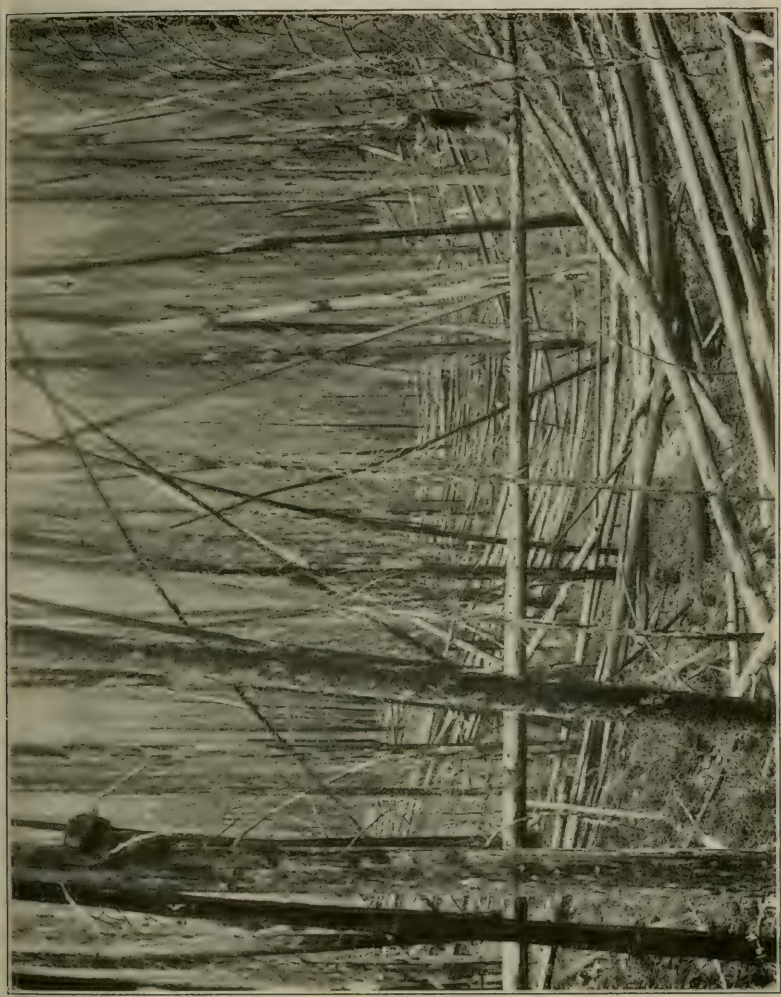

FIG. 43. An old burn in a well developed mixed forest. A typical representation of the destruction by fire of the coniferous forests of the Northwest.

FIG. 44. A five-year-old burn on a dry slope in Thatuna Hills. Under the cover of the fireweed numerous seedlings of yellow pine, Douglas fir, and tamarack are to be found.

FIG. 45. Rock Lake near Spokane, Washington. The thin basaltic soil supports an open growth of *Pinus ponderosa* and, in more sheltered places, *Pseudotsuga mucronata*. (Photograph by Palmer.)

FIG. 46. A sharp ecotone between prairie and forest on a wind-swept slope in Tekoa Mountains.

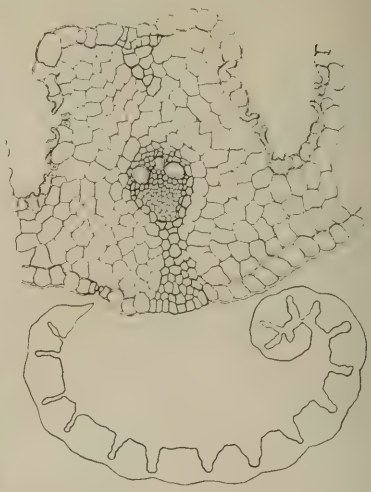

FIG. 47. The bunch-grass, *Agropyron spicatum*. Diagrammatic cross-section and detailed segment of a leaf showing its xerophytic anatomical structures.

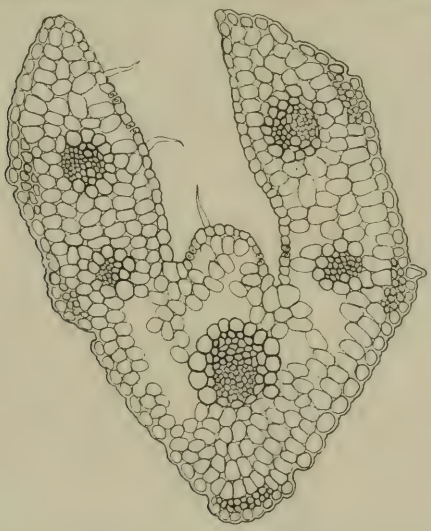

FIG. 48. Bunches of *Festuca ovina ingrata*. The cross-section of one of the setaceous leaves shows that it is well adapted to endure drought.

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Vol. XVII April–July, 1917 Nos. 2, 3

University Studies

Published by the University of Nebraska

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LINCOLN, NEBRASKA

UNIVERSITY STUDIES

VOL. XVII *April–July* 1917 NOS. 2, 3

THE MEETING OF THE ESTATES-GENERAL, 1789: THE UNION OF THE THREE ORDERS, JUNE 24 TO JUNE 27

BY JEANETTE NEEDHAM

I

The calling of the estates-general for 1789 marked the culmination of a long and bitter struggle between the king and the privileged orders, caused chiefly by the financial embarrassment of the country. The victory over the king was the signal for a still more bitter conflict between the third estate and the privileged classes over the organization of the estates-general. It was continued after the formal opening of the estates in May, 1789, under the guise of a new contest, over the manner of verification of credentials. Although outwardly but a matter of parliamentary procedure, this question in reality veiled that other most important question of whether there should be a single assembly with majority rule, upon which the third estate insisted, or an adherence to the ancient custom of three assemblies with vote by order. Consequently the decision on credentials would imply the settlement of the other question which was the real cause of strife. Conferences due to the initiative of the clergy failed to break the deadlock; nor did the renewal of the conferences, under the direction of the government, bring more satisfactory results. At last, after more than a month of dissension, this struggle of the orders, which had at bottom the further question of how France should be reformed, was resolved

by the assumption of supremacy on the part of the third estate, when, on June 17, it declared itself a national assembly.

As the consequence of this decisive step, which in a sense marked the end of the first phase of the early revolution—the strife of the orders—the government, through Necker, began the formulation of a plan for a second interference by which it hoped to compromise with the deputies of the commons and to prevent all power from passing into their hands. However, before the execution of the project—delayed by the opposition of the reactionary court to Necker—could be effected, the government itself had forced on the very thing that the plan was to avert.

On June 19, the same day on which Necker's plan for a royal session was considered for the first time in the council of ministers, the clergy closed their discussion of verification of credentials and put the matter to a vote. The vote resulted in a very small plurality for verification by order because the majority of the deputies had divided their votes among three other propositions, all of which, however, favored verification in common.

After what appears to have been the closing of the session,[1] this majority remained in the hall and held a meeting with the Archbishop of Vienne as the presiding officer. The result of two hours of deliberation was the unanimous agreement of the one hundred forty-one members present to the following decree: "The plurality of the members of the clergy assembled have been of the opinion that the definitive verification of credentials should be done in the general assembly, under the reservation of the distinction of orders and other reservations of right." Those present signed the decree and eight absent members added their names later, making a total of one hundred forty-nine in favor of common verification.

This action of the majority created consternation among the adherents of verification by separate assemblies. The union was to occur the next day. Not only would it be a severe blow to

[1] The minority claimed that the assembly had been legally adjourned before the majority held this session. The majority, as will be shown later, denied that such was the case. Their version of the affair was that the minority, seeing that they were losing their advantage, proclaimed the assembly adjourned in spite of the protests of the majority. The minority left the hall, but the majority continued the work of checking up the vote.

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the order of the clergy, but it would render more precarious the already difficult position of the government. So the minority of the clergy sought the assistance of the king and ministry. During the night of June 19, the Cardinal de la Rochefoucauld and the Archbishop of Paris made a hurried trip to Marly to beg the king to prevent the ruin of the order of the clergy. In view of this plea and of their own perception of the danger to the authority of the government, if the prospective union were to occur, the ministry decided to suspend the sessions of all the orders until June 22, under the pretext of preparations for the royal session, announced for that date.

The threatened union of the clergy with the third estate was averted, but the other result of the government's action was the momentous session and oath of the tennis court, June 20, by which the third estate practically declared that no one had the right to suspend or dissolve the national assembly and that the sovereign power was transferred to the people forever. The national assembly then adjourned to meet the day of the royal session.

But dissension within the king's council over the plan to be presented there led to a postponement of that session for a day. Consequently, the hall of the estates was still closed June 22. Bailly, president of the national assembly, was notified of the government's action, but received no prohibition of a meeting of the third estate. After some search for a suitable place, the national assembly finally gathered in the church of St. Louis, where the majority of the clergy came at last to join them.

This accession of the clergy was hailed with intense joy. Doubtless, their coming did strengthen the external position of the assembly, but there is every indication that the clergy had no intention of accepting the policy of that body in any respect except in the matter of the verification of credentials. Their decree of June 19 stated clearly that all rights, which distinguished the clergy as a separate order, were in no way to be impaired by their union. The Bishop of Chartres, who headed the deputation of June 22 that announced the clergy's intention to join the third estate, referred to the "majority of the order of the clergy" and stressed the "common verification of cre-

dentials" as their sole object. The Archbishop of Vienne, who led the majority and who, curiously enough, was placed at the side of President Bailly, in his speech to the assembly, called his followers the "majority of the deputies of the order of the clergy to the estates-general." "This reunion," he added, "which to-day has for its object *only the common verification of credentials*,[1] is the signal and, I may say, the prelude to that constant union which they desire with the other orders, and especially with that of the deputies of the commons." Thus verification of credentials was their sole purpose in coming and his reference to "that constant union" doubtless meant nothing more than harmony in the relations of the orders.

It was not the sort of union that Bailly had in mind in expressing the joy of the national assembly at their coming—a union which had for its object the sinking of all class distinctions in the body of the national assembly. But the very fact that the majority of the clergy supported the commons in just one phase of their policy must have strengthened the latter to meet the crisis which they faced the next day, especially as more than one interpretation might be placed upon the clergy's action.

In the royal session of June 23, from which Necker was conspicuously absent—a striking testimony to the failure of his conciliatory scheme—the king, unconscious of the significance of the action of the assembly on June 20, presented the much modified plan. The project embodied two sections, an outline of procedure dealing with that particular session of the estates-general, and a sort of charter which, from its indefiniteness and lack of guarantees, could not be accepted by the third estate. All acts of the national assembly were nullified, deliberation by order enjoined, and immediate separation of the deputies commanded. To these imperative orders, the representatives of the commons openly refused obedience by remaining in the hall and decreeing that the national assembly persisted in all its preceding acts. When reminded by the master-of-ceremonies of the king's order to separate, the deputies challenged him to expel them by force and took positive steps for protection by declaring their persons inviolable. In the evening, the report

[2] The italics are not found in the text of the decree.

that Necker, the people's idol, had resigned, caused great popular apprehension, and it was only at the personal request of the king that the minister consented to renounce his resolution to withdraw.

The momentous day of the royal session closed with the king and the third estate at open issue. It remained to be seen whether the king would enforce the decrees that had been proclaimed, whether the national assembly would persist in its opposition, and what the attitude of the clergy and the nobility would be toward the stand of the third estate. Furthermore, there were the questions of the preservation of harmony with Necker in the ministry, and of the loyalty of the troops to the government should it summon them to its aid in the evidently impending struggle.

II

The sight that met the deputies when they assembled on June 24 was not one to inspire confidence in a peaceable settlement of the issue, or to appease a populace already stirred to excitement by the course of events. As on the previous day, bodies of the French Guards, probably several hundred in all, surrounded the hall, and again the representatives of the people were obliged to make their entrance in the midst of armed men who indicated the particular door of access which each order should use.[1] But not only on the outside was a military display to be found. The interior of the hall as well was invested with troops.[2] Force was at hand, apparently in readiness to execute

[1] Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 73; *Lettre d'un membre de l'assemblée nationale*, 38; *Procès-verbal*, No. 6, 3; *Point du jour*, I, 44; Duquesnoy, I, 125; *Assemblée nationale*, I, 212; *Courrier de Provence*, *Lettre* XIII, 12; Biauzat, II, 138; Jallet, 102, 103; *Bulletins d'un agent secret*, No. 47 (*La révolution française*, XXIV, 71). Of these sources the *Procès-verbal*, Boullé, and the *Lettre* state that the troops were French Guards. Bailly (I, 223), re-affirms the same. The author of the *Lettre* gives the number as four to five hundred. Boullé says: "Trois barrières extérieures établiés dans la rue à quelque distance l'un de l'autre étaient gardées par des gardes françaises."

[2] *Procès-verbal*, No. 6, 2; Bailly, I, 224. The second corroborates the first and adds that the officer's name was Rennecourt. Evidently, the interior sentinels were of the provost guard since the *Procès-verbal* states that "un officier des gardes de la prévôté de l'hôtel est entré," while a committee of three was sent to the "troupes placées à l'extérieur de l'hôtel."

the royal decree of June 23 that the public should be excluded from every session and the command that deliberation should be by separate order. But just how far would the vacillating king, under the influence of his reactionary entourage, presume to go in the conflict with the nation's representatives? Would he dare to use force against them? These were the impending questions. There was a certain assurance for the commons in the fact that the king had not evicted them on the previous day, although he had been challenged to do so, and that no attempt had been made to seize the leaders of the assembly during the night, as doubtless had been feared.

It is clear that excitement, indignation, and apprehension as to what the results might be were rife among the deputies at the military investment of the hall.[3] The probable effect of the presence of troops upon the excited populace, it may well be believed, was not the least of their fears. Duquesnoy, in his view of the situation, definitely expressed this feeling when he said: "This measure, which is infinitely vicious in itself, was still more so under the circumstances when excited spirits were not able to witness, without indignation, such an attempt against the public liberty. . . . In order to justify it, it is said that it was necessary to give protection to citizens threatened by the people, but . . . the sight of troops served only to irritate the people and to furnish excellent pretexts to those who are able to excite them."[4]

But despite the unwisdom of such a measure and the threat implied against free deliberation, there was no retreating on the part of the men who had assumed the sovereign power. Every

[3] *Point du jour*, I, 44–45. The additional precautions taken to protect the deputies by Target's motion would indicate such fears. Duquesnoy, I, 125–26; Bailly (I, 223–24) gives some account of what he himself did in the matter. Although Bailly is dependent, mostly upon the *Point du jour*, *Courrier de Provence*, and *Procès-verbal*, the fact that he corroborates what they state adds somewhat to the value, for he saw the events. In this instance, he gives material that seems to be what he remembered. *Lettre d'un membre de l'assembleé nationale*, 38.

[4] Duquesnoy, I, 124–125. The action of the crowd on the morning of June 23 and the Necker incident of the evening of the royal session were enough to indicate what a popular demonstration might mean if it were hostile.

move, cautious though it might be, indicated but more clearly their persistence in the stand they had taken. Their first act after the opening of the assembly by the president was a re-emphasis of their resistance of the previous day; the decrees passed after the royal session were re-read.[5] Not content with this action, they seem to have taken further steps in the development of their attitude of persistency by making more comprehensive the decree of inviolability, and by providing for the printing of their proceedings. The *Point du jour* is responsible for the statement that on the reading of the motion of inviolability, M. Target proposed an additional provision. By that measure, the deputies were to be protected from civil and criminal prosecutions, or, at least, the assembly, upon appeal to it, was to decide upon the cases in which its members should not be exempt from prosecution. While, by the original act, the deputies were to be protected from arbitrary seizure by the government, through the added clause they were to be secured from any arrest whatsoever unless the assembly itself should decree that detention were permissible. To the proposed addition, Pison du Galland is reported to have made objections on the ground that since it concerned the limits of executive power, it could not be appended without the king's sanction. The decree of the previous day, however, being only a declaration of rights, did not require the royal assent. Apparently, Mirabeau made clear the nature of the provision and removed the objection by declaring that Target's motion was not a new law, but a provision of the rights of man. Furthermore, he urged the necessity of establishing an impenetrable barrier as a guarantee for the deputies against the obscure legislation of the court at that time when the principles of the national assembly were not yet established. Accordingly, without evidence of longer debate, the motion is said to have been adopted.[6]

[5] *Procès-verbal*, No. 6, 1; *Point du jour*, I, 44. The *Point du jour* does not directly state that the decrees were read, but the matter of the discussion relative to the decree of inviolability indicates that such was the case.

[6] *Point du jour*, I, 44–45. Strangely, the *Procès-verbal* makes no mention of this motion, but because of the reliability of this paper, we may feel reasonably certain that this clause was added. *Mercure de France: Journal Politique de Bruxelles*, No. 27, 4 juillet 1789, 40. The last named source states: "Quoi-

The other new point in the assembly's policy of persistency—the decision to print its records[7]—was an act of almost direct defiance to the government which demanded closed sessions and which would prevent, as far as possible, the dispersion among the people of knowledge of the assembly's acts. By the printing of its records, the national assembly would not only give a certain legality and dignity to its stand, but, above all, it would acquaint the nation with the actual workings of the body. Through this means of direct appeal, there would come the opportunity to create popular sentiment in its favor. Such a result of its action was highly essential at this time, since popular opinion was the only support the assembly could summon to uphold its position. Such a support would be vitally necessary in case the situation, then pending, was rendered critical by the reactionary party about the king.

The government, on its side, in addition to policing the hall within and without, took further steps to impress its policy upon the deputies and to gain recognition of its action on June 23 from the unrecognized national assembly. By two letters, one from the grand master-of-ceremonies, M. de Brézé, and another from the guard of the seals, Barentin, it sought to emphasize officially that which it had been attempting to accomplish by means of troops since the morning of June 23, namely, the order that the third estate should enter the hall by the door in the Rue des Chantiers.[8] When the general condition of affairs

que l'auteur de l'arrêté ait défendu cette addition, en citant le privilége des communes anglaises, l'avis d'un troisième membre, que l'addition exigerait la sanction royale, a prévalu."

[7] *Procès-verbal*, No. 6, 1; *Point du jour*, I, 45. Mr. Baudouin, who was named as official printer, had been elected a *député suppléant* of the third estate of Paris. (Brette, *Les Constituants*, 7.) The order of events differs in the two sources. The *Procès-verbal* has this item immediately after the reading of the two decrees. The *Point du jour*, on the other hand, places the record of this action much farther along, after the officer s report concerning the troops. This is a good instance of how two independent and reliable sources may differ.

[8] *Point du jour*, I, 45; *Procès-verbal*, No. 6, 1; Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 74; *Assemblée nationale*, I, 212; Bailly, I, 223. The first two sources say that two letters were received and read; the other two mention only one, that from the grand-master-of-ceremonies. The *Assemblée*

under which the order was given is taken into consideration, it may well be assumed that it was intended to mean more than appeared on its face and that by the execution of this one command, the government anticipated the carrying out of a larger part of the policy outlined in the royal session. If the deputies were forced to enter by definite doors, there would be a greater possibility of preventing any union of the estates or any ingress of strangers.

In addition to the letters, the government sent to Bailly the addresses and declaration of June 23.[9] Thus it asserted further that the king was maintaining his position despite the fact that he had kept Necker, who had opposed the work of the previous day. And it may well have been a question to the assembly as to just what the real attitude of Necker was and whether he had any connection with this step. But whatever the government might have hoped to attain by such action, the assembly, after having annulled all that the documents represented, by their action of the afternoon of June 23, refused—so Bailly

nationale says of this letter: "M. Bailly a fait l'ouverture de la séance par exposer qu'il avait reçu une lettre de *M. le grand maître.*" In speaking of this error, Brette says (*La révolution française*, XXIII, 61, footnote): "Ce mot ne s'employait jamais alors pour désigner le grand maître des cérémonies, mais bien le grand maître de la maison du roi, titulaire d'une charge considerable dont l'hôtel était voisin de celui des Menus." As to the contents, the *Point du jour* states: "M. le président a lu une lettre de M. le garde-des-sceaux et une autre de M. de Brézé, pour que l entrée de la salle des députés du tiers état tût désormais dans la rue du Chantier." This would indicate that both referred to the same thing. Bailly wrote: "Je reçus une lettre de M. le grand maître des cérémonies, qui m'instruisait que dorénavant les députés des communes entreraient par la rue des chantiers." This would indicate that only the one from the grand master-of-ceremonies dealt with the place of entrance. Neither the *Procès-verbal* nor the *Assemblée nationale* mentions the contents of the letters. But we have Barentin's own statement that on the evening of June 23, he had sent to Bailly a letter in regard to the place of entrance for the third estate. In *La révolution française* (XXIII, 71, footnote), Brette quotes the following extract from a bulletin of Barentin, dated June 24: "Je join ici le bulletin de ce qui s'est passé à la Chambre du Tiers. La lettre de moi qui y est annoncée est celle par laquelle, d'après les ordres de Votre Majesté, j'ai écrit hier à M. Bailly de prévenir MM. les députés d'arriver par la rue des Chantiers."

[9] *Procès-verbal*, No. 6, 2; Bailly, I, 225.

states—to weaken their position either by re-reading the arbitrary articles or by granting them any discussion.[10] Apparently, no opportunity was to be given members who might be favorable to the government's plans to express themselves or to cause any noticeable dissension in the ranks of the assembly. Bailly makes the further statement that some did propose to annex the documents to the minutes with the remark, "pour mémoire;" others with the note, "pour y recourir en cas de besoin."[11] The assembly, however, would not vouchsafe them even so much attention as that and, presumably as the result of due deliberation, decreed simply to append them to the record of the day's proceedings, where they may be found.[12]

Neither attempt of the government to influence the action of the assembly through official communications resulted in any acknowledgment of its policy. Rather, the spirit of persistency in the assembly had been strengthened. But the attempts to infringe upon the liberty of the commons through the presence of armed troops was more formidable than any other means the government had used, not only on grounds of the possible consequences for the national assembly, but also of the probable effect upon the inflammable populace of the city. From the time of convening, feeling against the military occupation of the hall seems to have run high and it was perfectly natural that this feeling should find definite expression in some action of the assembly. Bailly must have been much aroused, for he reports that even before the opening of the session, he had

[10] Bailly, I, 227. While Bailly is mainly dependent upon the *Point du jour*, *Courrier de Provence*, and *Procès-verbal*, in this instance he had some other account or else memory served him on this point. The order of events in Bailly differs from that in the *Procès-verbal*. In the latter, the record of the reception of the documents comes immediately after the reading of the two letters. Bailly says: "Après le rapport des commissaires," *i. e.*, after the report of the committee sent to the troops, he submitted these documents to the assembly.

[11] *Ibid.* Bailly is the sole source for this point. He may have used some source inaccessible to me or he may have trusted to his memory.

[12] *Procès-verbal*, No. 6, 2. Bailly corroborates this statement and the fact that these documents are found at the close of the *Procès-verbal* for June 24, proves that this was the actual disposition made of them. Very probably, Barentin had sent them to the assembly.

investigated the situation. He learned that the large door, opening on the Avenue de Paris, which the deputies had been in the habit of using, was closed to the third estate, while the other orders still passed through it to reach their halls.[13] In all probability, the government's communication concerning the entrance on the Rue des Chantiers served to increase still more the spirit of excitement and resentment and to hasten the action of the assembly upon the matter.

After the session was well under way, Bailly himself, evidently, laid the matter before the assembly. He made the complaint that communication with the other orders was interrupted, that a military force was preventing the assembly from continuing its sessions, and that such action was contrary both to its liberty and to its right of self-policing.[14] It seems that he

[13] Bailly, I, 223, 224. Brette (*La révolution française*, XXIII, 71) quotes two other contemporaries who state that some of the doors were walled up. The first of these, Abbé Coster, says: " L'assemblée s'est formée à 9 heures dans la grand salle, les portes des galeries étant bouchées et bâties." In the other account, *Contre-poison ou compte rendu des travaux de l'assemblée nationale depuis le 27 avril 1789 jusqu'au 15 avril 1790, par un député patriote à ses commettants* this is found: " Nous vîmes bien, dès le lendemain de la séance royale que la cour avait cédé et non consenti. Notre salle était entourée de barricades et de soldats; son entrée était interdite au public; on avait même poussé l'attention (et c'est sans doute un des chefs-d'oeuvre du grand maître des cérémonies) jusqu'à murer la porte de notre salle du côté de l'avenue de Paris, et aboutissant aux emplacements destinés à la noblesse et au clergé de sorte que le tiers-état ne pouvait arriver que par la rue des Chantiers, la noblesse et le clergé par l'avenue de Paris." Another deputy in his *Lettre d'un membre de l'assemblée* (p. 38) says of the union: " par une porte intérieure, car on avait donné aux gardes, du côté de la porte du Tiers la consigne de n'y pas laisser passer ceux du clergé; et du côté de la principale entrée où sont les chambres des deux premiers ordres on avait fait murer pendant la nuit la principale entrée, appellée *Porte du Roi*, de sorte que le clergé pour parvenir jusqu'à nous a été dans le cas de prendre divers passages dans l'intérieur de cet édifice." Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 74, says: " On voulut y opposer un moyen physique et en conséquence on fit murer la porte par laquelle elle devait naturellement s'effectuer . . . la majorité . . . arriva par une porte dérobée dont on avait trouvé la clef."

[14] Boullé, *Documents inédits*, *Revue de la Rév.*, XIII, 74; *Lettre d'un membre de l'assemblée nationale*, 38; *Mercure de France: Journal Politique de Bruxelles*, No. 27, 4 juillet, 1789, p. 40; *Procès-verbal*, No. 6, 2; *Point du jour*, I, 45. The last states: " M. le président s'est plaint de ce que la communication

then followed the complaint with a proposal that inquiries concerning the orders of the troops be made, to enable the deputies to deliberate upon the situation.[15]

The assembly was in a position requiring the greatest caution and discretion on the part of its members, but every detail of their previous action seemed to warrant the belief that nothing conclusive would be done without careful and foresighted deliberation. However much they might be aroused by the presence of the troops, it was essential that they should know just what those troops were bidden to do in order to have a firm basis upon which to found their objections.

Evidently in response to Bailly's proposal, which must have been adopted, Rennecourt, officer of the provost guard in the interior of the hall, was summoned[16] and the minutes show that a commission consisting of Rostaing, Gouy, and Pison du Galland, was despatched to get information from the exterior guard.[17] It seems that Rennecourt willingly complied with the assembly's

avec les autres chambres était interrompue;" the first, "Un des messieurs a dit qu'on avait fermé les portes de communication intérieure de la salle." Bailly says in his *Mémoires* (I, 224) that he laid the matter before the assembly. In the first point of the complaint, the *Procès-verbal* and the *Point du jour* agree, but the latter says nothing of the succeeding points which are given in the *Procès-verbal* alone. Both Boullé and the *Lettre* refer to motions on the military situation, but say that no definite action was taken before the clergy came.

[15] *Procès-verbal*, No. 6, 2.

[16] *Procès-verbal*, No. 6, 2; *Point du jour*, I, 45; *Assemblée nationale*, I, 216–217. The ltter says: "La proposition fut acceptée," but it evidently refers to an incident of June 25, which Bailly gives (I, 234) regarding measures taken to secure the release of Rennecourt, who had been arrested. The *Assemblée nationale* seems to have confused occurrences of June 25 with those of June 24—a circumstance not so surprising when we remember that the editor was not present at the sessions and that the paper appeared but three times a week. The account continues: "M. Bailly a mandé ensuite l'officier de garde, pour lui demander de qu'il recevait les ordres, quels ils étaient." Neither of the other two sources says that it was in answer to Bailly's proposal that the officer came, but, in either case, the report of his coming immediately follows the record of the complaint. Bailly says in his *Mémoires* (I, 224): "Je demandai, par son ordre, M. de Rennecourt," just after telling about laying the matter before the assembly.

[17] *Procès-verbal*, No. 6, 3; *Assemblée nationale*, I, 217. The latter does not give the names, but says "deux députés avec un secrétaire."

request and reported that he was to prevent strangers from entering.[18] Furthermore, his fidelity to the government was, apparently, not such as to keep him from announcing that there was a door of interior communication about which he had no orders[19]—in all probability a circumstance arising from an oversight in the official instructions. Bailly writes that, when he was making his investigation, he had discovered a small door where there was neither password nor sentinel, but certainly, he did not mention that fact when he put the matter before the excited assembly.[20]

When, by personal report, the duty of the interior guard had been thus ascertained, the official record shows that the committee to the outside guard imparted to the assembly the results of their inquiries. The commanding officer, the Count of

[18] *Point du jour*, I, 45; *Procès-verbal*, No. 6, 2; *Assemblée nationale*, I, 217. The first says: "L'officier a exhibé des ordres écrits." The *Procès-verbal* states: "Un officier des gardes . . . a dit." The *Assemblée nationale* says: "Il dit . . . ." However, this need not imply any inconsistency. The man may have told what his orders were and have shown the written orders in substantiation. In making reports of what happened, different witnesses seized different details. As to the contents of the order, the *Assemblée nationale* gives this: "Il dit qu'il n'avait d'autres ordres que ceux d'obéir à l'assemblée." The *Point du jour* says of the written orders: "dans lesquels il n'était point fait mention de la communication des autres chambres." The *Procès-verbal* has this: "Et a dit qu'il était chargé d'empêcher les étrangers d'entrer dans la salle de l'assemblée."

[19] *Procès-verbal*, No. 6, 2–3. On June 25, we find this in Bailly (I, 234): "Au moment de lever la séance, j'appris que M. de Rennecourt avait été mis aux arrêts, pour le compte qu'il avait rendu hier à l'assemblée. Je fus très affligé du malheur de ce brave homme. J'écrivis sur-le-champ à M. de Villedeuil, pour demander sa liberté; j'engageai quatre membres de l'assemblée à voir M. de la Chappelle, qui avait ordonné les arrêts, et M. le Villedeuil, de qui cela dependait, comme ministre. M. de Villedeuil me répondit qu'il prendrait les ordres du roi. Il les prit, et M. de Rennecourt eut sa liberté le lendemain." Very clearly, this must have been the incident that the *Assemblée nationale* (I, 216), reported on the previous day: "M. Bailly demands à l'assemblée si elle voulait nommer quatre députés pour solliciter auprès du grande prévôté l'élargissement d'un garde mis aux arrêts, parce qu'il avait laissé entrer du monde dans la salle." The latter says the matter was referred to the assembly, but Bailly does not mention that action at all. Still Bailly may only be telling what the assembly empowered him to do.

[20] Bailly, I, 223–24.

Belloy, had informed the committee that he had orders to permit the members of the estates-general to enter, either individually or collectively, at any hour, but not to permit strangers to enter. In so far, his instructions were identical with those of the interior guard, but he had the additional duty of indicating the accesses to the different halls, conformably to the text of the earlier government communication.[21]

But despite the fact that both interior and exterior guards were charged to keep the public out, many persons, other than the deputies, are said to have been present.[22] Such a state of affairs reflects strongly upon the effectiveness of the troops, or, rather, furnishes a marked comment upon the degree of their disaffection toward the government. This attitude was revealed first, perhaps, in the readiness of the officers to yield to the demands for their orders, on the part of the assembly which had no legal power over them; then by the willingness of Rennecourt to impart information for which, apparently, he was not asked, as if he would correct the false impression of the assembly that communication with the other orders was not possible. Finally, the presence of strangers in numbers seems the strongest point of all in testing the fidelity of the troops. Had the latter been perfectly loyal to the government, it must have been well nigh impossible for many, not belonging to the estates, to have forced their way into the hall through two sets of guards.

But however effective or non-effective the troops may have been, the definite knowledge of what the government through those troops was ostensibly seeking to accomplish furnished the assembly a firm ground from which to present its side of the

[21] *Procès-verbal*, No. 6, 3; *Assemblée nationale*, I, 217. The latter merely notes this: "L'officier tenait ses ordres du roi." The former gives the full report of the officer to the committee. *Bailly* (I, 224) confirms what is given in the *Procès-verbal*. The *Point du jour* makes no mention of the committee to the exterior guard.

[22] Duquesnoy, I, 128; Bailly, I, 226–27. The former says: "A peu près deux ou trois cents personnes;" the latter: "Il y avait toujours de six cents spectateurs.' We may be sure that both are merely estimates and since Bailly wrote so long afterward, we may assume that his "600" is too high an estimate. We may feel certain that strangers were present, probably in noticeable numbers.

case. Still, it was not an easy matter for the assembly to express its views in some distinct plan of remedy. The condition of affairs gave rise to various motions, interrupted with much discussion which brought no results.[23] Finally, Mounier, possibly profiting by the preceding expression of ideas, made a motion in which he attempted to embody the more clearly defined views of the assembly as to the most efficient means of relieving their embarrassing situation. He proposed that a deputation be sent to the king to ask for the withdrawal of the troops on the grounds that the deputies, as representatives of the nation, should have the policing of their place of meeting, of entrance into and exit from their hall; that those who guarded the doors should be under their orders; and that until the government should remove the troops, the assembly could not deliberate with freedom in its ordinary place of meeting.[24]

On the launching of this motion, the assembly broke out into a period of heated debate over this particular proposal, and of discussion involving various other proposals related more or less closely to the matter under consideration.[25]

[23] Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 74; Duquesnoy, I, 128; *Assemblée nationale*, I, 213; *Lettre d'un membre de l'ass. nat.*, 38. All accounts indicate that the assembly engaged in discussion without definite aim.

[24] *Procès-verbal*, No. 6, 3–4; *Point du jour*, I, 45; Duquesnoy, I, 125; *Courrier de Provence*, *Lettre XIII*, 12; *Assemblée nationale*, I, 213. The latter merely mentions that there was talk of complaining about the military investment of the hall and does not name Mounier. The *Procès-verbal* likewise fails to mention the name of Mounier. The text of the motion as found in the *Procès-verbal*, however, is followed in the narrative. The other accounts do not give the details of the proposal, but rather the one fact of protest against the troops. *Bulletin d'un agent secret*, No. 47, dated June 25, 1789 (in *La révolution française*, XXIV. 71), notes that there was to be a deputation. This writer says it was to be composed of forty members, but evidently he had heard what was done the following day, although the number is still wrong. Twenty-four were to form the deputation as decided upon June 25.

[25] Duquesnoy, I, 125–126. He gives several motions which apparently came in after Mounier's, and at the clergy's entrance, he says: "Pendant qu'on s'occupait de ces divers objets, on a annoncé le clergé." *Point du jour*, I, 45. In this, the Mounier motion is followed by the account of one by Brostaret and Pison. *Procès-verbal*, No. 6, 4: "La déliberation sur cette proposition a été suspendue par l'entrée de MM. du clergé." So nothing had been decided upon. Since all these various motions, of which so little is

Evidently, there was one proposal which seems to have voiced the almost unanimous sentiment of the assembly, that of abandoning Versailles as a very effective way to combat the attempt against free deliberation. Duquesnoy wrote that he felt assured that such a step would be taken within a week if the hall were not freed, or if there were no longer hopes of conciliation with one of the other orders. But however favorable the attitude of the first two orders might have been, the presence of the troops seemed to preclude the realization of any hope of union. The indignant deputies had not considered merely the matter of removal in itself. Apparently, they had discussed also the desirability of certain places of which, up to that time, Nantes seemed to have the preference.[26]

Presumably, as another means of protest against the govern-

told, seem more or less related to this matter of removing the troops, we may assume that they came in during this period after Mounier's motion.

[26] Duquesnoy, I, 125. "Il y en a une qui a passé de bouche en bouche et qui tot ou tard sera adoptée." *Courrier de Provence, Lettre XIII*, 12. This account gives the following as one of the provisions of the Mounier motion: "Que si le roi ne les écartait pas, l'assemblée nationale se verrait forcée de se transférer ailleurs." *Bulletin d'un agent secret*, No. 47 (in *La révolution française*, XXIV, 71), says of the deputation, "pour se plaindre et déclarer que si, dans vingt-quatre heures, l'assemblée nationale n avait point une liberté entière, elle se transporterait dans un lieu où elle pût jouir pleinement de sa liberté." This man frequently mentions having Mirabeau's paper before him, but, in this instance, it seems hardly possible. Very clearly he wrote June 25 and Mirabeau's *Lettre XIII* includes the accounts of June 23, 24 and 25, so it does not seem likely that the latter account was available on the same day, June 25. The matter of removal must have been discussed, but it is not at all probable that it was incorporated in Mounier's motion, for no others mention it as a part of that proposal. The *Courrier* did not have the accounts written up regularly. Furthermore, Mirabeau, the nominal editor, had two associates who did the work for him frequently, so that may account for the statement that the motion had such a provision. Where the author of the *Bulletin d'un agent secret* got his information concerning the assembly, is not clear.

Duquesnoy alone mentions the place which seemed to be most favored for the seat of the assembly should it be obliged to change, but Arthur Young wrote on June 20 (*Travels through France*, 171) after he had commented upon the oath of the tennis court: "Their expectations were so little favorable, that expresses were sent off to Nantes, intimating that the national assembly might possibly find it necessary to take refuge in some distant city."

mental policy, Mirabeau took occasion, during the discussion over the troops, to attack the ministry whom he felt to be responsible for the military occupation of the hall. First he made a negative attack. He is said to have proposed, to the extreme astonishment of the assembly, that a deputation be sent to compliment Necker and Montmorin, the popular ministers who had dared to oppose the reactionary schemes of their colleagues. The assembly may well have been taken by surprise at the motion and have seen in it a humorous touch of Mirabeau's sarcasm, for, personally, he despised Necker. But when it was a question of furthering the assembly's policy of persistency against the court opposition, he could easily suppress any personal feelings.[27]

Then came what promised to be a positive denunciation of

[27] Duquesnoy, I, 125–126; *Assemblée nationale*, I, 213; *Journal* of Abbé Coster, under date of June 24. (Quoted by Brette, in *La révolution française*, XXIII, 74.) Duquesnoy says: "Ce n'est pas sans un étonnement extrême que l'on a oui le comte de Mirabeau dire: L'opinion publique nous a appris hier, Messieurs, qu'il est deux ministres populaires, M. Necker et M. de Montmorin. Je propose de leur faire une députation pour les complimenter:" Then, he adds: "M. Necker loué par Mirabeau! Certes, il faut croire aujourd'hui à tous les événements." The second source does not mention Mirabeau in connection with Necker: "Les autres pour députer vers M. le directeur-général, et lui témoigner la reconnaissance qu'inspire son dévouement et son courage pour salut de la patrie; pour le prier de ne pas donner sa démission." Only the Abbé Coster directly connects the affair of Barentin and of Necker, although the other two give the report concerning Necker, immediately before the proposition relative to Barentin. So far as content is concerned, the proposal relative to Necker might have been made when Necker's letter was read later. Abbé Coster wrote of the incident: "Cette séance est remarquable par une motion singulière de M. de Mirabeau. S'il n'était pas excessivement probable, a-t-il dit, que mon très cher et très honoré petit cousin, M. de Barentin, garde des sceaux de France, sera renvoyé sous quelques jours, je prendrais la liberté de vous lire un projet d'adresse au roi pour demander la démission de ce cher petit cousin, et feliciter, en même temps, Sa Majesté d'avoir enfin préféré les conseils de deux ministres patriotes (M. Necker et M. de Montmorin) à ceux de M. de Barentin."

Thus two of the accounts mention a deputation to Necker and one of these says Mirabeau made the proposal relative to such a step; the third says that if Mirabeau had not considered Barentin's dismissal imminent, he would have proposed, not a deputation to Necker but the project of an address to the king to compliment him for keeping Necker.

the reactionary Barentin, had not Mirabeau been restrained by a belief that the guard of the seals would soon leave the ministry. There is a report that others of the deputies had discussed privately the matter of Barentin's ministerial responsibility, but that Mirabeau first made public the feeling against the man who had been one of the noticeable figures in the royal session.[28] Mirabeau said something to the effect that if he did not have the well-founded expectation that the guard of the seals would soon leave office, he would propose that the assembly ask the king to dismiss him and perhaps others of the ministry who had supported the action taken in the royal session. However, under those circumstances he would defer action until the following day or later.[29] Probably in continuation of the same

[28] *Assemblée nationale*, I, 213; Branche wrote on June 24 (Biauzat, II, 138–139, footnote): "M. le garde des sceaux est renvoyé, et les déclarations d'hier regardeés comme anéanties." So others than Mirabeau believed that Barentin would lose his office. Le Hodey de Saultchevreuil, the editor of the *Assemblée nationale*, says of this: "La maladie de Madame de Barentin, la mort prochaine de son fils, donnait à croire que tous ces chagrins domestiques feraient renoncer M. de Barentin à une dignité que tant d'envieux cherchent à obtenir et qu'on conserve avec tant de peine. L'on ignore quels sont les faits qui serviraient d'appui à la denonciation. On lui reproche de n'avoir pas rendu exactement les adresses au roi. Mais cependant elles ont été toutes répondues par le roi."

[29] Duquesnoy, I, 126; *Assemblée nationale*, I; Abbé Coster, in his *Journal* (quoted by Brette in *La révolution française* XXIII, 74). The first quotes Mirabeau as saying: "Si je n'avais pas l'espérance bien fondée que mon digne cousin, le garde des sceaux, sera renvoyé ce soir, je proposerais à l'assemblée de faire une députation au roi pour supplier S. M. de faire justice des ministres qui lui ont conseillé l'attentat d'hier, mais, au moins, je prends date de ma déclaration et je demande à l'assemblée la permission de l'en entretenir demain." The *Assemblée nationale* gives this: "Mirabeau prit la parole et dit: qu'il aurait denoncé des aujourd'hui son digne cousin, M. le garde des sceaux, s'il n'avait la certitude excessivement fondée qu'il donnerait ce soir sa démission, mais qu'il se reservait de le faire demain." According to Abbé Coster, we have: 'S'il n'était pas excessivement probable, ait-il dit, que mon très cher et très honoré petit cousin, M. de Barentin, garde des sceaux de France, sera renvoyé sous quelques jours, je prendrais la liberté de vous lire un projet d'adresse au roi pour demander la démission de ce cher petit cousin."

There is somewhat of a variation in the accounts given, but not necessarily any striking conflict. If a deputation were sent, as Duquesnoy says was

topic of discussion—that concerning the removal of the troops—it is said that two other deputies, Brostaret and Pison, proposed an address to the king to disclose to his majesty the true principles of the national assembly.[30] This address was intended, possibly, to supplement the motion of Mounier. By an exposition of the fundamental ideas for which the body assumed to stand, and in accordance with which its action was regulated, the reasonableness of and necessity for the assembly's demand for withdrawal of the troops would be shown. The king would learn that the assembly was not seeking to usurp his prerogatives; that it was opposing only encroachments on its legitimate rights; that he could yield to the assembly's request without weakening his royal authority.

But, despite the various proposals bearing on the question, which were made, it seems that until half an hour after noon, at least, the assembly was still occupied with the matter of the military investment of the hall. Nothing definite concerning Mounier's motion or any other had been reached when the debate was suddenly arrested by a great disturbance in the vestibule outside the hall of the estates.[31] Whatever of appre-

proposed, the will of the assembly would have been made known through an address carried by the delegation. Hence, Abbé Coster has given one particular and Duquesnoy another. The *Assemblée* is concerned with an attack that would have been made. That may mean merely the sending of the deputation with an address, asking Barentin's removal from the ministry.

Dr. Albert Scheibe in his *Die französische Revolution* (p. 171) quotes the following statement from the *Archivo historico nacional*, sent home by the Spanish minister to France: "En la Asamblea Nacional han denunciado al Guarda Sellos como opuesto á las miras de ella y aun á la Reina por haber contribuido á lo mismo." June 24, 1789.

[30] *Point du jour*, I, 45.

[31] Duquesnoy, I, 126; "Pendant qu'on s'occupait etc.;" *Procès-verbal*, No. 6, 4; "La déliberation sur cette proposition a été suspendue par l'entrée de MM. du clergé;" *Courrier de Provence, Lettre XIII*, 12: "On n'eut pas le temps, etc." *Assemblée nationale*, I, 214; "L'on en était à ces discussions, lorsque l'huissier du clergé a annoncé le clergé;" *Point du jour*, I, 45; "A midi et demi, un grand bruit s'est fait entendre dans le vestibule de la salle nationale." *Lettre d'un membre de l'assemblée nationale*, 38. The latter says they were debating upon the military investment "lorsqu'à midi et demi la majorité du clergé est venue." *Mercure de France: Journal Politique de Bruxelles*, No. 27, 4 juillet, 1789, 40.

hension and alarm may have arisen was quickly dispelled or turned to joy by the sight at the entrance. Preceded by the doorkeeper, bearing the credentials already verified in a box,[32] the archbishops of Vienne and Bordeaux and the bishops of Coutances, Rhodes and Chartres marched majestically into the hall. Following them, came the stately procession of dark-robed clergy, which advanced amid resounding acclamations and shouts of joy on the part of the excited commons,[33] who stood to receive their fellow deputies.[34]

III

This action on the part of the majority was the result of a decidedly stormy session of the clergy, who had met at nine o'clock in their own hall.[1] In meeting separately, they had obeyed the royal injunction of the previous day. Jallet, a *curé* belonging to the majority, makes it appear in his *Journal*, that the members of the clergy who had joined the national assembly on June 22, agreed to this course out of deference to the will of the prelates in their group. He states that the bishops in favor of union called a meeting for six o'clock the evening of June 23, to be held at the lodgings of the Archbishop of Vienne. His apartments being too small, those present went to the hall of their order to consider their course of action, presumably, in view of the king's commands in the royal session. After de-

[32] Biauzat, II, 138: "La majorité du clergé qui a porté ces régistres." *Point du jour*, I, 46: "Un secrétaire portait;" Duquesnoy, I, 126: "Précédés de leur huissier portant les cartons;" *Assemblée nationale*, I, 214, says, "l'huissier du clergé a annoncé le clergé," and later comments on this official's following the majority (I, 215), adding, "les papiers, le procès-verbal, les régistres, la caisse que les contient, le clergé n'a rien laissé dans la chambre." Very probably, it was the doorkeeper who bore the box, but the editor of the *Point du jour* mistook the identity of the man.

[33] *Lettre d'un membre de l'assemblée nationale*, 38–39; Bailli de Virieu, 103; Jefferson, II, 486; Dorset, I, 225–226; Duquesnoy, II, 126; *Point du jour*, I, 45–46; Biauzat, II, 138; *Procès-verbal*, No. 6, 4; *Assemblée nationale*, I, 214–215; Jallet, 102; Thibault, 248; *Mercure de France: Journal Politique de Bruxelles*, No. 27, p. 40.

[34] Thibault, 248.

[1] Thibault, 247.

liberation they consulted their prelates to learn their opinion. The latter submitted a plan of conduct to be followed the next day. Jallet adds that it seemed wise, so they resolved to carry it out. He makes no definite statement concerning the nature of this plan. Evidently, it advocated submission to the king's command that they meet separately on June 24. Under that date, Jallet makes further explanation of the attitude of the majority. His own opinion was that they should go immediatey. to the national assembly instead of to the hall of the clergy He claims that this opinion had been adopted, but the prelates prevailed upon the majority to follow their plan.[2] Consequently, the entire order of the clergy met in its own hall.

The customary ceremony at the opening of the session, consisting of the celebration of mass and the invocation of the Holy Spirit,[3] was lengthened by prayers for a member whose death had been announced by the Archbishop of Paris.[4] The regular business was then taken up.

Copies of the king's discourses and declarations had been forwarded by the guard of the seals to the president of the clergy as well as to the president of the third estate.[5] The implication of this action was that the king expected the orders to begin at once the consideration of these documents. Who suggested their immediate examination is not certain, but very probably it was the presiding officer, the Cardinal de la Rochefoucauld. The proposal aroused violent opposition on the part of the majority. The Bishop of Nancy, who, it seems, was to read the documents, began, probably several times, but the majority created so much confusion and noise that he could not be heard.[6]

[2] Jallet, *Journal*, 100–101.

[3] Coster, *Récit*, 339; Barmond, *Récit*, 267.

[4] Barmond, *Récit*, 267.

[5] Coster, *Récit*, 339; Barmond, *Récit*, 267. The latter says the secretary of the guard of the seals sent the documents.

[6] Coster, *Récit*, 339; Barmond, *Récit*, 267; Thibault, 247; Jallet, 101. The first says " M. le Cardinal " proposed to have the declaration read, the second says the president suggested that it be done. Thibault states: " M. l'Évêque de Nancy a proposé à l ouverture de la séance, de faire lecture des déclarations." Jallet reports: " Les évêques opposants voulurent faire lire par l'évêque de Nancy le discours du roi et les déclarations; mais nous nous y opposâmes; il se fit un tel bruit que l'évêque ne put se faire entendre."

Two explanations of this opposition are clearly stated in the reports of the session: (1) An urgent demand that the results of the voting on the previous Friday be announced before the declarations were examined; (2) an equally strong insistence that the king's declarations be considered in a general assembly of the orders, instead of in the separate chambers.[7] Jallet claims that it was the Archbishop of Vienne, leader of the majority, who thus stated the latter's views.[8] Both demands were perfectly natural under the circumstances. To have proceeded to the reading and separate examination of the declarations would have invalidated the majority's action on June 19, whereas, by returning to the deliberation of that date, they hoped to force the minority to recognize what they had done.

A survey of the events of that hotly contested session is necessary to an understanding of the majority's insistence upon the further consideration of the action of June 19 and the minority's persistent refusal to entertain such a proposal. As previously stated the vote upon the question of verifying credentials occurred that day. Four different propositions touching the matter had resulted from the debate.[9] The first embodied the idea of verification by order, based on the plan of conciliation proposed by the king; the second was for verification in common, by going into the common hall of the estates-general; the third favored verification in common, but with the express condition that the members of the third estate recognize, by a preliminary declaration, the distinction and independence of the orders; finally, the fourth was for common verification only as a last resort, after every other possible means of conciliation had failed.

[7] Jallet, 101; Coster, *Récit*, 339; Thibault, 247; Barmond, *Récit*, 267–268; *Récit*, 262–265.

[8] Jallet, 101.

[9] Thibault, 237–238; *Récit*, 257–260. The latter indicates that there were four different propositions, but does not give explicitly the terms of each. Grégoire in *Etats-généraux*, *Extrait du journal de Paris*, I, 90–91, gives the impression that there were four. He quotes the first in full. It varies in order from that given in Thibault, but the proposals which it embodies are the same in essence.

[10] Jallet, 91; *Etats-généraux*, *Extrait du journal de Paris*, I, 90; *Histoire de la rév.*, I, 208.

The first was the proposal of the Archbishop of Paris;[10] the fourth is said to have been that of the Archbishop of Vienne;[11] the second is credited to M. de Coulmiers, Abbé d'Abbecourt,[12] but the author of the third is not mentioned. All except the first recognized the principle of verification in common, but varied as to the circumstances of its application.

Because of this situation, which led the majority to divide their votes among these three forms of verification in common, verification by order received a plurality of all the votes.[13] The minority claimed that this advantage was maintained in the subsequent checking of the vote, that it was duly proclaimed to the assembly, and that, consequently, the deliberation of June 19 was legitimate in every respect. The report drafted by the minority states that the first proposition received one hundred thirty-five votes, the second, one hundred twenty-seven, the third, nine, and the fourth only three, while three other deputies gave opinions independent of any of the four propositions. The roll was then called and each member was given an opportunity to confirm or change his vote. Certain changes did occur, but they were of a minor character. Two more votes were added to the first proposition and three to the second, but there was no further change. Thus, the final result was one hundred thirty-seven votes for verification in separate assemblies, to one hundred thirty for the second proposition, which declared for verification in common. The fifteen other votes remained scattered until the close of the session. Any later meeting in which combination of votes occurred was illegal.[14]

The majority reports, however, claim that the temporary advantage for verification by order was reversed during the roll-call, but, because of the machinations of the minority, the final result was not formally announced to the whole chamber. The minutes drafted by the majority state that the first proposition received one hundred thirty-two votes instead of one

[11] *Récit*, 258.

[12] Jallet, 91.

[13] Récit, 257–8; Thibault, 237–8; *Etats-généraux, Extrait du journal de Paris*, I, 81, 90–91.

[14] *Récit*, 257–261.

hundred thirty-five, the second, one hundred twenty-nine, instead of one hundred twenty-seven, the third, nine and the fourth, three. During the roll-call two other deputies, who had not voted before, joined the first, making one hundred thirty-four votes for verification by order. But, to offset that gain, the three deputies of the fourth idea shifted their support to the second, increasing its total to one hundred thirty-two votes. This entire group then transferred to the third proposition with its nine votes.[15] According to the majority, verification in common, as expressed by the third proposition and not by the second which, the minority asserted, united the most votes, had one hundred forty-one votes as the result of this shifting and combination, while verification by chamber had only one hundred thirty-four.[16]

[15] Thibault, 238; *Récit*, 259–260; *Histoire de la rév.*, 208–9. The second proposition, declaring simply for verification in common, attracted the most votes on the first count. Thibault and the *Histoire* agree that all these shifted to the third proposition, which embodied the idea of reservation of the rights of the clergy. The latter says this was done because the nine members adhering to the third form refused to abandon the idea of reservation. To obtain a majority, the greater number was obliged to submit to the will of the few, although some had already had their credentials verified in the national assembly, without reservation of any sort. The *Récit* denies that such a shift occurred. It admits that such a proposition was made, but, when the radically different character of the second and third proposals was seen, the motion was withdrawn. But even though so large a number did vote for verification in common without reservation, later they accepted the idea of reservation in the meeting held after the minority left. The reservation agreed upon in the decree, however, is not so extreme as that attributed to the third propositior, so concessions evidently were made on both sides.

[16] Thibault, 237–238; *Etats-généraux*, *Extrait du journal de Paris*, I, 81, 83–84, 89–91. The figures in the latter accounts vary slightly from those given by Thibault, but all agree that the partisans of verification in common ultimately obtained the majority.

Below is given a tabulation of the figures recorded in minority as well as in majority reports. The *Récit* is the official statement of the minority, Thibault that of the majority. Grégoire and Jallet represent the latter. The *Journal de Paris* (*Etats-généraux*, I, 81) reports the figures it had heard. Its information seems to have come from minority sources, since its figures are similar to those in the *Récit*. The second column below indicates changes that occurred during the roll-call for checking the vote.

Before this result was attained, however, the partisans of verification by order had the session adjourned, in spite of the protests of their opponents. Grégoire, one of the majority, says that this was done because the adherents of the proposal of the Archbishop of Paris regarded themselves as assured of the majority, since the roll-call was about at an end.[17] But the minutes of the majority declare that it was the combination of votes which aroused some members of the minority, because the whole question of verification was being reduced to two propositions,[18] the very thing that the higher clergy desired to avoid. When the matter came up on the morning of June 19, it was proposed to vote simply yes or no on common verification, but the higher clergy forced the vote on several propositions in order to split the majority for verification in common.[19] But the combination of votes threatened to deprive them of their victory. Since they controlled the presidency, they appealed to the Cardinal de la Rochefoucauld to adjourn the session and the minority left the hall.[20]

Récit		Thibault		Grégoire		Jallet	*Journal de Paris*
1st . . .	135+2=137	132+2=134		136		136	137
2d. . . .	127+3=130	129	141+8	128	145		129
3d. . . .	9	9	(absent)	several	+	148	9
4th. . .	3	3	=149	several	several		
Independent	3				later		

The *Histoire de la révolution* (I, 208–209) states that the first had 137 votes, verification in common, 129 without amendment, 9 with amendment, but that finally the adherents of verification in common obtained 149 votes in all. The list of those who joined the national assembly on June 22 is given as 149 in the *Procès-verbal*, No. 4, p. 11–16. Viochot, in correcting the figures given by the *Journal de Paris*, sent a list of 149 signers of the decree to be published in the paper. (*Etats généraux, Extrait du journal de Paris*, I, 83–84.) Without a doubt, verification in common had that number of adherents by the time the union occurred. The figures on the supporters of verification in separate assemblies vary from 134 to 137.

[17] *Etats-généraux, Extrait du journal de Paris*, I, 91.

[18] Thibault, 238.

[19] *Ibid.*; Jallet, 90–91; *Histoire de la rév.*, I, 207–208.

[20] Thibault, 238; Grégoire, in *Etats-généraux, Extrait du journal de Paris*, I, 91; *Histoire de la rév.*, I, 208–209. Jallet does not say that the session was suspended before the roll call was complete, but he does make it appear that the minority left before the supporters of verification in common. He implies

The majority remained to continue the roll-call and under the presidency of the Archbishop of Vienne, they deliberated for some time.[21] The one hundred forty-one members present passed the decree to go to the general assembly to verify their credentials and all signed it.[22] Later a few absent members added their names until the total was raised to one hundred forty-nine.

Jallet states that the secretary proclaimed to the crowd in the court the victory for union,[23] but, in spite of that, at least one of the leading newspapers, the *Journal de Paris*, reported that verification by order received one hundred thirty-seven votes, the number claimed by the minority, verification in common only one hundred twenty-nine, while nine others were scattered.

that they wished to leave before the crowd learned of their defeat: "Les évêques vaincus et leur parti défilèrent promptement avant que la nouvelle de leur défaite ne fut répandue. Il y a dans les cours une foule immense: on les laissa passer; on ignorait même si la délibération était finie." The other three say that the minority left before the final count was complete.

The *Histoire* gives a slightly different version of the situation preceding the minority's departure. After stating that verification by order had 137 votes, verification in common, 129 without amendment and 9 with amendment, it continues: "Les évêques dirent que la majorité était de leur côté, et battirent des mains. Les vrais patriotes proposèrent alors à ceux qui avaient voté avec amendment pour la vérification commune, de se réunir aux cent vingt-neuf qui avaient opiné purement et simplement. Ceux-ci le refusèrent, et les évêques s'applaudirent de nouveau de la majorité. Alors les cent vingt-neuf dirent unanimement et par acclamation qu'ils acceptaient les réserves, qu'ainsi ils avaient la majorité d'une voix. Les prélats consternés voulurent lever la séance sans la clorre, et sans prendre un arrêté définitif, afin d'empêcher du moins de constater leur défaite. Mais on leur déclara, que fallût-il passer la nuit, on ne séparerait pas sans avoir déterminé le véritable nombre des suffrages et sans avoir pris un arrêté.

"Ils sortirent cependant: mais MM. les archevêques de Vienne, de Bordeaux et l'évêque de Chartres ayant repris leur place, chacun en fit autant l'appel fut recommencé, et MM. les évêques de Rhodez, d'Orange, d'Autun et de Coutances et plusieurs autres s'étant réunis, la majorité se trouva de cent quaranteneuf voix."

[21] Jallet, 92–93; Thibault, 239. The first says this session lasted until five o'clock, but evidently that was the time when the minority left. Thibault says the session of the majority did not close until seven o'clock in the evening.

[22] Thibault, 238–239; Viochot in *Etats-généraux, Extrait du journal de Paris*, I, 83–84; *Procès-verbal*, No. 4, 11–16.

[23] Jallet, 93.

It added that the session was adjourned at that point and that, apparently, no definite decree was passed.[24]

Members of the majority protested immediately against the inaccuracy of the paper's information. On June 20, Grégoire wrote to the editors of the *Journal* regarding their error in the matter of numbers. He inclosed with the letter a full account of the session of June 19, which agrees, in the main, with that given in the minutes.[25] The next day Viochot, Curé de Maligny, deputy of the clergy of Troyes, sent to the paper a complete list of the signers of the decree, unanimously passed by the majority, and asked that it be printed along with his letter. Lack of space, so the editors stated, prevented the insertion of the list, but they published the letter and stated the number of the signers of the decree to have been one hundred forty-nine.[26]

Through such appeals as these, as well as by their subsequent action in joining the national assembly, the majority strongly fortified its position in public opinion. But the minority had not formally recognized the procedure of the majority on June 19. Jallet says that the latter was prepared on June 20 to force the confirmation of their action by a new roll-call if the minority showed any inclination to question it.[27] The suspension of the assemblies until after the royal session prevented the execution of this plan. On the other hand, the unyielding hostility of the minority toward the action of the majority was made very clear through the part played by the former in closing the halls on June 20.[28] It was only natural that the majority should seize the first opportunity to wrest from the recalcitrant higher clergy, recognition of the legality of their action on June 19.

All their efforts in that direction on the morning of June 24 were doomed to failure. The rather brief accounts available upon the debate indicate that it was recriminatory as well as most disorderly. The majority howled down every attempt to

[24] *Etats-généraux, Extrait du journal de Paris*, I, 81.

[25] *Ibid.*, 89–91.

[26] *Etats-généraux, Extrait du journal de Paris*, I, 83–84.

[27] Jallet, 93–94.

[28] Jallet, 93; Coster, *Récit*, 341.

read the declarations, but they could not force the minority, which controlled the presidency, to resume the deliberation of June 19. The latter insisted, either that the business of that session had been finished, or that everything done prior to June 24 had been nullified in the royal session. Hence, it was essential to do just one thing, to examine the king's declarations, to see whether they would accept these or not. The majority declared that such examination could be made only in a general assembly and refused to let the documents be read.[29] The Abbé d'Abbecourt, who is said to have proposed verification in common, rose to speak, but could not be heard. Jallet says that he waited until things quieted down and then attacked the bishops for their personal abuse of him since he had joined the party of union. He taunted them for pretending to control the majority of the chamber and summoned them to produce, at once, in defense of their claim, the *procès-verbal* which they had drafted outside the chamber on Friday evening and presented to the king that night.[30] Jallet says that this meeting occurred at the church of Notre Dame and lasted until half past nine.[31] The minority asserted that the meeting of the majority after the champions of verification by order left the hall June 19 was irregular and illegal. To be accused by the *abbé* of similar but more flagrantly illegal action, inasmuch as their meeting was held outside the chamber, must have infuriated the aristocratic minority.

Finally, the majority grew tired of the tactics of the minority. Jallet states that the Bishop of Langres began a speech which threatened to embroil the chamber in a long discussion. The *curés* in favor of union took the initiative in ending the intolerable situation. They sent Jallet to notify the prelates in favor of union of their intention to betake themselves at once to the national assembly.[32] The Archbishop of Vienne arose and, apparently without any formal action, although Coster refers

[29] Jallet, 101; Barmond, *Récit*, 267; Coster, *Récit*, 239; *Récit*, 262–265.

[30] Jallet, 101.

[31] *Ibid.*, 93.

[32] Jallet, 101–102.

to a "tumultuous appeal to their partisans," the majority retired from the hall.[33]

IV

Not only had that which the court opposition would have prevented been effected, but it had been accomplished without evidence of any real advances by the assembly toward bringing about such union, although doubtless the desire for such a step was strong. Duquesnoy states that, at the time when Mounier made his motion concerning the removal of the troops, he had proposed also that a deputation be sent to the clergy to learn whether anything prevented them from joining the assembly. But in all probability, nothing was done with this, at least, no further trace of it is found.[1] It was very natural that the assembly should feel that since the clergy had united with it once, they would do so again. Under the circumstances, it can well be assumed that the deputies of the commons were anxious to have any support from the other orders that might sustain them in their stand.

In viewing the significance for the assembly of the action of the clergy, we note that not only was the position of that body greatly strengthened by the voluntary accession of so many, but one of the conditions which had given potency to the demand for withdrawal of the troops was removed. The complaint that communication with the other orders was interrupted no longer held. If the guards had been placed to keep the orders apart, as must have been believed, they had failed, at least, to execute such instructions in full. Although the main door leading into the general assembly hall was closed by troops, the clergy had found a way that was unguarded.[2] Either some door had been

[33] Coster, *Récit*, 339; Thibault, 247. Under the circumstances, formal action could hardly have been taken by the majority, although in drafting the minutes Thibault says, "ceux que avaient voté . . . pour la vérification des pouvoirs en commun, ont arrêté de se rendre sur-le-champ dans la salle de l'assemblée nationale."

[1] Duquesnoy, I, 125.

[2] Jallet, 102. This man, who was among the number that came to join the national assembly, says of the route the clergy had to take: "On avait fait fermer la porte de communication qui conduisait des salles des ordres à

overlooked or else the government had hoped to prevent a union by the moral influence of the presence of troops rather than by actual appeal to force. The hope of conciliation with one of the other estates, without which, according to Duquesnoy, the assembly would have been obliged to go elsewhere, had been realized. Furthermore, the union had solved, in a measure, one of the unfathomed problems of the previous evening. The attitude of the first two orders toward the national assembly was shown in part by the action of the majority of the clergy in not proceeding to obey the royal dictates without conferring with the third estate.[3]

celle de l'assemblée générale; nous fûmes obligés de passer par un souterrain fort étroit et fort indécent." Another witness whom Brette quotes (*La révolution française*, XXIII, 71–72) also mentions the underground passage thus: " Il était défendu aux soldats de nous permettre aucune communication par l'intérieur. Cette combinaison si prudente fut encore renversée parce que la majorité du clergé, qui avait délibéré de se réunir, trouva une fausse porte qui communiquait par des souterrains à notre salle, et vint nous joindre." Brette considers it improbable that the majority of the clergy used the underground passage, when the number and the rank of some of them are recalled. Since there was, however, a narrow passageway leading from the large court, directly to the hall where the third estate sat, he thinks it not unlikely that some, perhaps malcontent *curés*, took this shorter way instead of making the detour from the large court by way of the *Rue St. Martin*. The door of this interior way may have been the unguarded door that Bailly found (I, 224) or the one that Rennecourt mentioned when he reported his orders. Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 74. He states: " On fit murer la porte par laquelle elle [the union] devait naturellement s'effectuer . . . la majorité du clergé . . . arriva par une porte dérobée dont on avait trouvé la clef." *Lettre d'un membre de l'assemblée nationale*, 38. He says the majority came " *par une porte intérieure*, car on avait donné aux gardes, du côté de la porte du tiers, la consigne de n'y pas laisser passer ceux de clergé; et du côté de la principale entrée appellée *Porte du Roi*, de sorte que le clergé, pour parvenir jusqu'à nous, a été dans le cas de prendre divers passages dans l'intérieur de cet édifice."

[3] *Lettre d'un membre de l'assemblée nationale*, 39. This deputy states: " L'Archevêque de Vienne a requis l'Assemblée d'arreter que demain les actes de la Séance Royale soient discutés et la liberté publique préservée. Jallet (101) says that in the deliberation of the clergy before the union the aim of the majority was to prevent a reading of the king's declarations in the chamber of the clergy; *Point du jour*, I, 47; *Procès-verbal*, No. 6, 4. These both represent the Archbishop of Vienne as giving for the motive of the clergy's act,

Immediately after the entrance of the clergy, the archbishop of Vienne, as their leader, was placed at the right of President Bailly, while a secretary from the same body was joined to those of the assembly.[4] Then the archbishop, apparently at the invitation of the assembly, set forth in a speech the object of the second union.[5] "Gentlemen," he said, "the majority of the clergy resolved this morning in the hall where were assembled the deputies of the order to the estates-general, that the contents of the minutes of the royal session which was held yesterday should be left to the decision of the three orders united. I request the assembly with which the order of the clergy has just united, to proceed immediately to the common verification of the credentials of the members of the clergy which have not yet been passed upon, that they may be able to deliberate, in the general assembly of the representatives of the nation, concerning everything that occurred in the royal session of which I have just spoken."[6] Very clearly, he ignored the policy of the national assembly which had disposed of this matter the afternoon of June 23. If the clergy had any intention of accepting the principles of the third estate, their leader did not make that known on this occasion. But in closing his speech, evidently he sought to emphasize the good feeling of the clergy toward the national assembly and the comparative unimportance of insisting upon form. "We have established," he said, "by a double act, the union of the clergy with your assembly; first by our real accession in the meeting at the church of St. Louis; second, by the plan of the majority which we have just carried out. Particular acts and exact forms are unworthy of our body and of so august an assembly when the question of public right is at stake, that which pertains to the truth of acts and leads to just and legal affairs." The clergy would pass over formalities

the necessity of discussing in a general assembly the declarations of the royal session.

[4] *Point du jour*, I, 46; *Jallet*, 102; *Procès-verbal*, No. 6, 4–5; *Assemblée nationale*, I, 216; Duquesnoy, I, 126.

[5] *Procès-verbal*, No. 6, 4; *Point du jour*, I, 47.

[6] *Procès-verbal*, No. 6, 4, gives just this as the speech of the Archbishop of Vienne.

of organization in order to consider more important matters—more important in their judgment.[7]

As soon as the general excitement attendant upon the union had somewhat abated,[8] a roll call of the clergy was begun, the names being read by their secretary.[9] During this call, several incidents occurred which served to designate various members of the clergy as especially pleasing or displeasing to the national assembly because of their attitude toward the public welfare. When the name of the Archbishop of Aix, a member of the absent minority, was read, a deputy, said to have been M. Boucher from the same *sénéchaussée*, rose to denounce the archbishop as unfaithful to the mandates of his constituents in thus breaking with the majority of the clergy. But the Archbishop of Bordeaux came to the defense of the accused by stating that those members of the clergy who were present cherished the hope of a complete union of their order and therefore did not wish to recognize the division in their ranks. Accordingly, he asked that the denunciation of the Archbishop of Aix might not be entered on the record.[10] Duquesnoy states that he asked the same favor for the absent Bishop of Lydda who, evidently, had been likewise attacked.[11] When, in the course of the call,

[7] *Point du jour*, I, 47. In the matter of the archbishop's speech, this account seems to supplement what is given in the *Procès-verbal*. It summarizes briefly the points made in the portion found in the minutes, and then continues, giving a quotation, presumably the conclusion of the speech.

[8] *Assemblée nationale*, I, 214; Duquesnoy, I, 126.

[9] *Jallet*, 102, says "les secrétaires du clergé firent l'appel": *Point du jour*, I, 46: "Un secrétaire du clergé . . . a fait l'appel des députés du clergé." The other accounts merely indicate that there was a roll call of the clergy; Duquesnoy, I, 126; *Assemblée nationale*, I, 214, *Procès-verbal*, No. 6, 5; *Lettre d'un membre de l'assemblée nationale*, 39; Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 74. The latter states: "Un appel public accompagné d'une inscription de chacun d'eux sur le procès-verbal."

[10] *Point du jour*, I, 46; Duquesnoy, I, 126–27; *Assemblée Nationale*, I, 215–216. Only the *Point du jour* gives the name of the man that criticised the archbishop. *Bulletins d'un agent secret*, No. 47 (in *La révolution française*, XXIV. 71) makes some mention of the attack on the Archbishop of Aix and the defense by the Archbishop of Bordeaux. Since this man wrote on June 25, he may have seen this in the *Point du jour* which came out in the early morning. Elsewhere he has made use of this paper.

[11] Duquesnoy, I, 127.

Abbé Grégoire and Curé Jallet were named, they were greeted with warm applause, but the name of the notorious Abbé Maury was violently hissed.[12]

According to the *Point du jour*, it was in the midst of this proceeding, about a quarter after one, that an interruption was caused by the reception of a letter from Necker to President Bailly.[13] In view of the events in which Necker had figured the previous evening, the effect of such a communication upon the assembly can well be imagined. When the letter was read, setting forth Necker's desire to express his profound gratitude for the marks of good-will and esteem shown him by members of the third estate on the night before and proclaiming his determination to work with renewed zeal for the public welfare, it was received with ringing applause and cries of "Vive M. Necker!"[14]

Again the hopes of the deputies must have been raised high by Necker's declaration of his intention and by his extremely friendly attitude toward those who had annulled what he himself had opposed in its inception. His action was all the more significant in view of the fact that he was in the service of the government, which was doing all that it could to enforce its reactionary policy. Any suspicion that Necker was connected with such an attempt must have been removed by the com-

[12] Duquesnoy, I, 126, 127; *Point du jour*, I, 46. Jallet is not named in the first account, but perhaps he is meant in this: "Lorsqu'on nommait un des prélats assistants, les applaudissements recommençaient." Maury is not named in the second, but there is reference to him, evidently, in this sentence: "Il n'en a pas été de même d'un autre membre du clergé, plus connus par quelques panégyriques que par son patriotisme." There is some slight variation in the order or reporting these incidents of the roll call. The *Assemblée nationale* (I, 214–215) indicates that there was a great deal of applause during the roll call, so much that Bailly had to ask for silence.

[13] *Point du jour*, I, 46; *Assemblée nationale*, I, 216, also says that the letter came during the roll-call; Duquesnoy, I, 127, seems to follow practically the same order; *Procès-verbal*, No. 6, 15, records the reception of the letter after the completion of the roll-call and the report of the committee of verification following the call.

[14] *Duquesnoy*, I, 127; *Point du jour*, I, p. 46 (gives copy of letter; I, 72); *Procès-verbal*, No. 6, 15–16; *Assemblée nationale*, I, 216; *Histoire de la rév.*, I, 228.

munication. Bailly, anxious that the popular favorite should know the degree of the assembly's good will, asked, or at least was granted, permission to report the profound impression made by the letter, as evidence of the commons' hearty support of the reform minister.[15]

At this move of the assembly, the Archbishop of Vienne announced that his order would likewise send a deputation to compliment Necker for his loyalty toward and decided stand in defense of the people.[16] In this action of the clergy, there is given a noticeable commentary upon the real status of the national assembly, in the minds of the orders. By constituting itself national assembly, the third estate had effected an act which, by its very nature, involved the elimination of any marked recognition of the individual orders within its precincts. Now, however, there was presented the curious spectacle of a definite recognition of the distinctive order of the clergy as joined to the assembly, yet not forming an integral part. Even before the proposal to send a separate deputation, this peculiar attitude had been evinced, first in placing the president of the clergy by the side of the president of the national assembly and then by adding to the secretaries of the assembly, a secretary to represent the clergy and having him call the roll for his order.

On the completion of the roll call, apparently after the interruption caused by Necker's letter, the result showed that about one hundred and fifty were present and probably somewhat more than one hundred and forty absent.[17] It is a rather striking

[15] *Point du jour*, I, 47: "M. le président a été prie de témoigner incessament à M. Necker;" *Procès-verbal*, No. 6, 16: "M. le président a dit qu'il rendrait compte;" Duquesnoy, I, 127: "Le président a demandé d'être autorisé à lui rendre compte." Just how the matter of reporting devolved upon Bailly is not clear from the statements given above.

[16] *Point du jour*, I, 47; Duquesnoy, I, 127; *Procès-verbal*, No. 6, 16.

[17] Coster, *Récit*, 339; Thibault, 248; *Lettre d'un membre de l'assemblée nationale*, 39; Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 74. The first and third give the number as 151, the second 149, Boullé, 155 present, 142 absent. Bailli de Virieu had heard that there were 150, according to his letter of June 29, 1789, p. 103. Jallet, 102, says: "Nous nous trouvames cent cinqante-un, ce qui causa la plus vive joie: La majorité était démontrée:"

fact that of the clergy who had united with the assembly, more than three fourths were from the lower ranks of that estate, being largely *curés*.[18] An explanation of why these men should support the body that seemed to promise reform may be found, doubtless, in this other fact, that they represented the class of country pastors, who no less than the peasantry, had suffered under the arbitrary exactions of the "old regime." Consequently, they felt most keenly the deplorable condition of the country and the need of regeneration. Of the upper clergy, very few had come. The archbishops of Vienne and Bordeaux and the bishops of Coutances, Rodez, and Chartres completed the list of higher ecclesiastics[19] who had renounced the privileges enjoyed in common with the nobles by joining an assembly opposed to the existing system, of which "privileges" formed no inconsiderable part.

Point du jour, I, 47, gives the following list; " Présens, 151, absens, 143; " *Assemblée nationale*, I, 214: " Deux curés de tous ceux qui avaient signé l'arrêté, ont resté dans la chambre, néanmoins le nombre de la majorité n'a pas été altèré, il était de 151 contre 145; " Duquesnoy, I, 126: " Mgr. l'archevêque de Vienne, celui de Bordeaux, les évêques de Rodez, de Chartres et de Coutances . . . suivi de près de 150 autres ecclésiastiques; " *Etats-généraux, Extrait du Journal de Paris*, I, 107. This gives 151 present, 143 absent.

Bulletins d'un agent secret, No. 47 (*La révolution française*, XXIV, 71), gives 151 as the number, but possibly this came from the *Point du jour;* Branche (Biauzat II, 139, footnote) wrote on the evening of June 24: " Le clergé, en majorité, est venu se joindre à nous ce matin, au nombre de 158 contre 142; " Procès-verbal, No. 6, 5–14, gives a list of the clergy that joined. There we find 147 names and one other who came at the close of the call, making 148 in all. If there were 151, as the more reliable witnesses assert, then some of the names must have been omitted in the *Procès-verbal*. *Mercure de France: Journal Politique de Bruxelles*, No. 27, 40. It gives 151 present, 143 absent, possibly following the *Point du jour*.

[18] Based on a computation from the list given in *Procès-verbal*, No. 6, 4–15.

[19] Bailli de Virieu, 103; *Lettre d'un membre de l'assemblée nationale*, 38; Duquesnoy, I, 126; *Point du jour*, I, 45–46; *Assemblée nationale*, I, 214: *Procès-verbal*, No. 6, 5–14, list of clergy given; Branche (Biauzat, II, 139, footnote) asserts that there were six of the highest clergy. He names the two archbishops and the three bishops and says that there was another whose name he could not recall.

The entrance of the clergy completely changed the course of the assembly's action. This was due, doubtless, to the fact that the accession in itself served to remove some of the conditions which had made deliberation upon the military occupation of the hall so urgent. Very evidently, no further consideration of that matter was engaged in and the rest of the session, after the roll-call, was taken up with affairs that concerned both orders. The minutes of the famous session in the church of St. Louis were read, evidently that the clergy might rectify any errors in the record.[20]

The next business was to hear and pass upon the report of the committee of verification, consisting of members from both orders, which had been enlarged at their previous meeting of June 22.[21] The *Procès-verbal*, which gives the only detailed account, states that M. Bouchotte acted as spokesman for the committee.[22] He reported that, of the credentials under consideration, most of which belonged to members of the clergy who had been given provisional seats, all had seemed in proper form. But a closer examination had revealed that the clerical deputies from the *sénéchaussée* of Bourbonnais had presented, not the record of their election, but the record of their taking the oath when the election was announced. The assembly, in passing upon the report, recognized as legitimate all the credentials except those of the deputies from Bourbonnais. As to those, it decreed that the deputies should present the proper credentials within two weeks, and that, in the meantime, they might have a provisional seat.[23] Evidently, to further, as speedily as possible, the work of verification that the Archbishop of Vienne had called for in his speech, the committee was instructed to meet again that evening with the Archbishop of Bordeaux.[24] With that action, the assembly formally adjourned its session about

[20] *Procès-verbal*, No. 6, 14; *Point du jour*, I, 47; *Assemblée nationale*, I, 216. Only the *Point du jour* says that the reading took place that the clergy might rectify errors.

[21] *Procès-verbal*, No. 6, 14; *Point du jour*, I, 47.

[22] *Procès-verbal*, No. 6, 14.

[23] *Procès-verbal*, No. 5, 14–15.

[24] *Ibid.*

three o'clock until the usual hour, nine o'clock of the following morning.[25]

V

The renewal of the schism in the chamber of the clergy led to decisive action by the minority. Since both of the secretaries, Thibault and Dillon, accompanied the majority to the national assembly, Barmond and Coster were appointed secretaries *pro tem.*[1] The latter claims that, after the retirement of the majority, the body had the minutes of June 19 read. Doubtless, these were the minutes which, according to Jallet, had been drafted in the special session of the minority, held at Notre Dame, on the evening of June 19. Coster continues that these proved that the legal plurality was for verification by order, and adds that it was decreed to print this record in a memoir justifying the course of the minority.[2]

With all opposition removed, they returned to the proposal of the president, that the documents of the king be read. After the reading, they deliberated upon the action to be taken under the circumstances.[3] Without evidence of any debate, the chamber passed a decree defining their position upon one phase of the first declaration, namely, upon its provisions touching

[25] *Ibid.*; *Assemblée nationale*, I, 217, says that the assembly was adjourned until ten o'clock the following day, but the minutes are to be relied upon in the matter. The hour of closing is stated in the following accounts: *Lettre d'un membre de l'assemblée nationale*, 39; Boullé, *Documents inédits*, *Revue de la révolution*, XIII, 74.

[1] Barmond, *Récit*, 268.

[2] Coster, *Récit*, 339. Jallet alone makes reference to the existence of minutes drafted by the minority on June 19. It seems reasonable to presume that these were the minutes read on June 24, inasmuch as those drafted by Thibault contained the majority's version of the vote on June 19, and would not have been read by the minority to justify its action. Further proof of the existence of another set of minutes is given in the fact that the figures, presented by the minority in the memoir drawn up June 26–27 and submitted to the chamber on June 27, differ from those found in the majority's minutes, drafted by Thibault. There is no evidence of the formulation of any memoir, prior to that drawn up June 26–27. Probably the latter was the memoir in which the record read on June 19 was incorporated. I have been unable to find a copy of the minutes of the minority on June 19.

[3] Barmond, *Récit*,, 268.

the verification of credentials. The decree in full follows: "The members of the clergy, assembled in the hall allotted to their order, for the purpose of renewing their sessions in conformity with the will of the king, the first discourse and first declaration of His Majesty concerning the present session of the estates-general having been read, and in consequence of articles I and II of the aforesaid declaration, have agreed to recognize as valid all credentials already provisionally verified, of members absent as well as present, upon the rights of whom to represent their constituents, no contest has arisen. Consequently, they have declared that they constitute themselves from this time on, the active assembly of the order of the clergy to the estates-general. The said assembly has decreed in regard to the communication of credentials among the orders and the judgment upon contested credentials, to conform to articles II and X of the said declaration."[4]

Thus, they expressed an unqualified acceptance of the king's policy upon the verification of credentials, because it harmonized so closely with the proposition which the minority adopted on June 19. One clause of that same proposition provided for their immediate organization as the chamber of the clergy.[5] Since article I of the first declaration of the king formally approved the idea of separate orders, it was only natural that the clergy should act at once upon both its own decree and that of the king, by declaring themselves the legitimate chamber of the order. Jallet asserts that they justified their course on the ground that they occupied the hall of their order.[6]

Certain members of the order took some exception to the

[4] Barmond, *Récit*, 269; Coster, *Récit*, 340. The latter says merely: "La chambre s'est constituée ordre du clergé et a déclaré qu'elle exécuterait la déclaration du roi publiée dans la séance royale." *Procès-verbal . . . de la noblesse*, 268. The latter gives the text of the decree when it was communicated to the nobility. The texts in it and in the *Récit* are identical except in one instance. In the last sentence, the latter refers to articles XI and XII of the king's first declaration while the former gives articles II and X. The *Récit* is wrong, as shown by comparison with the first declaration of the king.

[5] Thibault, 237; Grégoire in *Etats-généraux, Extrait du journal de Paris*, I, 90.

[6] Jallet, 102.

decree. A deputy whose name is not given, but who, on June 19, is said to have been in favor of common verification, declared that his respect for the king and his will according to the declaration, attached him to the chamber, but he could not vote in this case. Two deputies from Dauphiné, Dolomieu and Saint-Albin, were of the opinion that the minority should draft minutes of the sessions of June 19 and 24 to be submitted to the king. In regard to the verification of credentials, they persisted in their opinion given in the session of June 19, for the adoption of the form proposed by the king and unanimously accepted without reservation by the clergy. In the matter of constituting the chamber of the clergy, they could not consent because of the mandates of their constituents. Consequently, they asked that their explanation be entered on the record and this request was granted to them.[7] Incidents such as these probably account for the discrepancy between the number of deputies said to have remained in the hall and the number of votes for the decree.[8]

When the newly constituted chamber proceeded to the formal election of a president, the same individuals seem to have protested again.[9] But there is no evidence of further opposition to the choice of the Cardinal de la Rochefoucauld, who had been serving as provisional head of the order.[10] The newly elected president thanked the assembly for the honor conferred upon him. Without completing their formal organization, the clergy adjourned about five o'clock to meet the next day at half past nine.[11]

The separation of the minority was the signal for an outbreak

[7] Barmond, *Récit*, 269–270.

[8] *Moniteur*, I, 96; Jallet, 102. The former states that 132 remained in the hall of the clergy, but that only 118 voted for the decree. The accounts of the sessions of the clergy in this compilation are drawn largely from Barmond's *Récit*, but these details are not given in the latter. Jallet claims that only 119 remained in the hall.

[9] Barmond, *Récit*, 270.

[10] Barmond, *Récit*, 270; Coster, *Récit*, 341. The latter mentions the election of the president under date of June 25, when the rest of the officers were chosen.

[11] Barmond, *Récit*, 270; Jallet, 102.

of hostile demonstration at their expense, as they passed from the hall of the estates. All day long, a crowd had surged about the building, eager to catch the slightest hint of what was going on inside. It is not strange that this crowd, irritated by the presence of the troops, fearful for the fate of the national assembly, and worn by the strain of waiting, should have given expression to its feelings in some extreme action. Evidently as the time for the adjournment of the assemblies approached, most of the spectators shifted around into the *Avenue de Paris*, in front of the entrance of the upper orders. Presumably, in anticipation of some disturbance, the troops that had been stationed before the door of the third estate, were moved into the avenue. It was estimated that five to six hundred guards were located there and in adjacent streets.[12] It was only three o'clock when the national assembly adjourned,[13] but the street upon which their entrance opened was practically clear at that time. A deputy of the third estate states that he walked around the building to find the troops collected in the avenue and the crowd in wait for the higher clergy. He lingered for some little time, conversing with people in the crowd, and then, with other deputies, went to dinner. After they had dined, reports reached them that the minority of the clergy feared to leave the hall on account of the hostile crowd.[14] So it was probably five o'clock, if we may trust Jallet, before any of the minority dared to venture forth.[15]

Doubtless, the entire group was subjected to insults and hisses, as Coster claims.[16] The Cardinal de la Rochefoucauld, especially, is mentioned as having been hissed[17] and the Bishop of Senez was hit on the head with a stone. Jallet says a strong

[12] *Lettre d'un membre de l'assemblée nationale*, 39.

[13] *Ibid.*; Boullé, *Documents inédits, Revue de la révolution*, XIII, 75; Jallet, 102. The latter states that the national assembly had been adjourned for some time when the clergy dispersed at 5 o'clock.

[14] *Lettre d'un membre de l'assemblée nationale*, 39–41.

[15] Jallet, 102. He makes it appear that the closing of the session was delayed that the minority might avoid a hostile demonstration.

[16] Coster, *Récit*, 340.

[17] Young, 180; Bailli de Virieu, 104. Neither one was an eyewitness, or even in Versailles.

man saved him from further maltreatment by throwing him into a house and closing the door.[18] The Archbishop of Paris, however, was the chief object of popular disfavor. He had been hissed and threatened with violence the day before at the royal session,[19] and again that morning as he came to the chamber of the clergy.[20] Presumably, some of the reasons for this bitterness toward him rested upon no foundation in fact, but the people believed that he was guilty of numerous crimes against the popular cause. It was well known that he was one of the staunch defenders of the idea of separate assemblies and that he had proposed, in the chamber of the clergy, that credentials be verified by order. On behalf of those principles, he made the clandestine night trip to Marly, June 19, which was the cause of much of the animosity displayed toward him.[21] Public rumor interpreted that affair in the worst possible manner. One version of the Marly episode was that the archbishop had gone into the royal presence with the crucifix in his hand as a witness to what he was about to say; that in a wild outburst to the king, he had attributed all the evils of France in the matter of religion to a foreign and irreligious minister.[22] In truth, he was generally accused of being the bitter adversary of Necker and of having worked to effect his dismissal.[23] Others charged him

[18] Young, 180; Jallet, 102; *Bulletins d'un agent secret*, *La révolution française*, XXIV, 71. Young and the writer of the *Bulletins* were in Paris. Probably their information came through the Palais Royal. Young refers to the victim as the Bishop of Beauvais, evidently an error based on the fact that Jean-Baptiste-Charles-Marie de Beauvais was Bishop of Senez. The writer of the *Lettre d'un membre de l'assemblée nationale* states that the latter was responsible for the failure of the Archibshop of Paris to accompany the majority to the national assembly. He says that the archbishop had descended the first flight of stairs from the hall of the clergy when the Bishop of Senez, who dominated him, ran after him and induced him to return to the minority.

[19] *Lettre d'un membre de l'assemblée nationale*; Vaissière, 14.

[20] *Ibid.*, 40; Coster, *Récit*, 340.

[21] Coster, *Récit*, 341; Jallet, 93.

[22] *Correspondance d'un député de la noblesse de la sénéchaussée de Marseilles avec la Marquise de Crequy*, *Documents inédits*, *Revue de la révolution*, II, 37; Bailly, I, 232. Bailly tells a similar story.

[23] Coster, *Récit*, 341; Saiffert, *Revue de la révolution*, VII, 252.

with having frightened the king and queen by representing the third estate as bent on the annihilation of the royal authority.[24] Naturally, he was designated as one of the court cabal that had instigated the proceedings in the royal session.[25] He was also held responsible for the failure of all the clergy to join the third estate.[26]

In view of this manifold popular indictment, the archbishop was hissed in the most violent manner as he emerged from the building. Mud was thrown at him as he entered his carriage; the coachman tried to save him from further indignities, by driving madly down the street toward his lodgings. But the crowd pursued, increasing in number as it went, hurling rocks at the carriage and breaking the glass.[27] The story goes that the terrified prelate descended precipitately from the vehicle to seek refuge in his lodgings at the Mission, occupied by the priests who conducted the services at Notre Dame, but the shower of stones forced him to take shelter behind a sentry box. He was rescued from this situation by some deputies of the commons who interceded with the crowd, took him into their midst, conducted him into the church of Notre Dame, and closed the door after him.[28]

[24] *Lettre d'un membre de l'assemblée nationale*, 40.

[25] Boullé, *Documents inédits*, *Revue de la révolution*, XIII, 74; Jefferson, II, 486.

[26] Young, 180; Bailli de Virieu, 104.

[27] Boullé, *Documents inédits*, *Revue de la révolution*, XIII, 74–75; Saiffert, *Documents inédits*, *Revue de la révolution*, VII; Coster, *Récit*, 340; Biauzat, II, 138; Branche, Letter of June 24, quoted in Biauzat, II, footnote, 138–139; *Lettre d'un membre de l'assemblée nationale*, 41–42; Jallet, 102; Duquesnoy, I, 128; Young, 180; *Bulletins d'un agent secret*, *La révolution française*, XXIV, 71; *Bailli de Virieu*, 104; Dorset, I, 224–225; Jefferson, II, 486.

The first six, at least, seem to have been eyewitnesses of all or part of the affair. The last five were in Paris, but Jefferson went to Versailles the next day.

[28] *Lettre d'un membre de l'assemblée nationale*, 42. This man says that he watched the crowd from his window. Branche, one of the deputies in the crowd, says also that the archbishop escaped into the church. Coster says that he had to take refuge with the beadle, probably connected with the church of Notre Dame. Duquesnoy reports that the archbishop was saved from further maltreatment through the intervention of some deputies.

By this time, the crowd had grown to huge proportions[29] and was besieging the door of the Mission. Their victim having escaped, they began to throw rocks at the windows of his apartment and broke some of the glass. Naturally, the disturbance brought troops to the scene. Some patrols are said to have appeared first, but no attention was paid to them. Then came two large detachments of French Guards, who took possession of the doorway of the Mission. They were followed by a larger number of Swiss Guards who drew up in order, loaded with ball in the presence of the people, and advanced to the support of the French Guards who had begun to repulse the crowd. At that moment, a squadron of mounted body guards galloped up and they also are said to have loaded in full view of the people. In spite of that fact, the crowd gave little heed to the troops and the latter manoeuvred for some time, evidently, without any result other than to increase the size of the crowd. Finally, however, passages were forced and the people began to scatter,[30] but several witnesses ascribe this outcome to the influence of some deputies of the commons, aided, perhaps, by some *curés*. The whole demonstration lasted an hour, according to Branche, a deputy of the third estate who claims that he was one of the group of nine men who helped to quell the tumult.[31] Fortunately, the affair ended without serious consequences. One young man received a slight wound from a blow by a sabre, given by an

[29] Saiffert, *Revue de la révolution*, VII, 71; Branche, footnote in Biauzat, II, 139. The former estimates that there were three thousand people in the crowd. Branche says ten thousand, but certainly the latter number must be greatly exaggerated.

[30] Coster, *Récit*, 341; Boullé, *Documents inédits*, *Revue de la révolution*, XIII, 75; Saiffert, *Revue de la révolution*, VII, 71; Branche, in Biauzat, II, footnote, 139; *Lettre d'un membre de l'assemblée nationale*, 42-43; Jallet, 102–103; *Bulletins d'un agent secret*, *La révolution française*, XXIV, 70.

[31] Biauzat, II, 138; Branche, in Biauzat, II, footnote, 139; Jallet, 102–103; *Lettre d'un membre de l'assemblée*, 43. Both of the first claim to have been among the deputies who talked to the crowd, and Branche adds that there were nine who assisted in restoring quiet. Jallet says that there were five or six Poitevins among them, and that some *curés* aided the deputies of the third estate.

officer of the body guard, and Coster adds that another man was suffocated.[32]

That the riot did not lead to a clash with the troops doubtless was due to the disaffection among the latter, who were more or less in sympathy with the crowd. Baron de Saiffert observed that the troops lacked decision in their attitude toward the crowd and he criticized them for not quelling the uproar, instead of merely stopping the throwing of stones.[33] It was current rumor in Paris that the guards took no action against the people, except to laugh at them.[34] The French Guards declared that they would have turned their bayonets against the body guards, had the latter clashed with the people.[35] Evidently, the danger of that was not great, to judge from the later conduct of the body guards, who complained because they were obliged to act as patrols, when their particular service was to guard the person of the king.[36]

The demonstration produced the desired effect upon the Archbishop of Paris. He was so terrified by his experiences that he promised to join the national assembly the next day, it is stated, although his promise was not executed until two days later. The crowd is said to have demanded, evidently as a guarantee of his good intentions, that he send his credentials at once to the committee of verification of the national assembly.[37] The evidence indicates that he complied with the request immediately. Boullé states that, before the uproar had abated, the frightened archbishop sent an order to the Archbishop of Bordeaux authorizing his friend to submit his credentials to the committee which met that evening at the latter's apartments.

[32] Boullé, *Documents inédits*, *Revue de la révolution*, XIII, 75; Coster, *Récit*, 340; Jallet, 103.

[33] Saiffert, *Revue de la révolution*, VII, 71.

[34] *Bulletins d'un agent secret*, *La révolution française*, XXIV, 70.

[35] Jallet, 106.

[36] Duquesnoy, I; Salmour, in Flammermont, *Correspondances diplomatiques des agents étrangers*, 231.

[37] *Lettre d'un membre de l'assemblée nationale*, 43. This man says that he strolled past Notre Dame to see the crowd at close range and found them very well satisfied with their action, the archbishop having assured them that he would join the assembly the next day.

Boullé adds that the order was shown to the crowd, but the Archbishop of Bordeaux refused to act upon the commission and advised his fellow deputy to delay his action for a day or two, in order to give an appearance of greater liberty.[38] Other accounts report that he did send his credentials to the committee that same evening, but with a statement that he had been forced to take this step.[39] Whereupon, the committee of verification, if we may believe the *Journal de Paris*, laid the credentials before the assembly the next morning, and it decided that a valid verification pre-supposed a free and voluntary submission of credentials. Consequently, they were returned to the Archbishop.[40] This item called forth a protest and explanation from the Archbishop of Bordeaux on June 27, when he wrote to the paper, denying that the assembly had ever heard of the credentials before the morning of June 26, the day on which the Archbishop of Paris joined the assembly. That same evening the credentials were presented to the committee of verification of which the Archbishop of Bordeaux was president, and reported to the assembly on June 27.[41] It may have been that the Archbishop of Bordeaux did prevent the formal submission of the credentials to the committee of verification on June 24, and thus made it possible for the Archbishop of Paris to submit them himself when he joined the assembly in person. No account, other than that of the *Journal de Paris*, refers to any action upon the credentials in the assembly June 25, but it seems unlikely that so much rumor could have arisen if the Archbishop of Paris had not promised at least to send the credentials and so made the public believe that he had despatched them to the committee.

Despite the apparent victory of the crowd over one of the prominent leaders of the clergy, there was no reason for hoping

[38] Boullé, *Documents inédits*, *Revue de la révolution*, XIII, 75.

[39] Jallet, 103; *Etats-généraux*, *Extrait du journal de Paris*, I, 108; *Lettre d'un membre de l'assemblée nationale*, 43. The latter says that the archbishop had it done by his secretary.

[40] *Etats-généraux*, *Extrait du journal de Paris*, I, 108. Jallet states (p. 103) that the committee of verification returned them and does not mention the assembly's action at all.

[41] *Etats-généraux*, *Extrait du journal de Paris*, I, 127–128.

that the rest of the minority would yield to the policy of the commons. But the addition of the larger part of the clergy to the national assembly gave to that body a strong majority of all the deputies to the estates-general. That very fact in itself was sufficient to make the position of the non-united deputies less tenable and that of the third estate more firm. But, to increase still more the determination of the national assembly to persist in the execution of its policy there had come, just as the deputies were separating on June 24, the cheering announcement that the minority of the nobility would join them the following day.[42]

VI

The session of the nobility, on June 24, however, showed no indication of the impending defection of part of their members. The day passed without decisive action of any sort, although no meeting had been held since June 19. After the reading of the minutes of that date,[1] some time was devoted to a report by the president concerning a deputation to the king. The chamber had decided upon this some days earlier. An address, to be delivered to the king whenever he should see fit to receive the deputation, had been drafted and approved in the session of June 19.[2]

The Duke of Luxemburg, president of the order, explained

[42] Duquesnoy, I, 127: "Au moment où l assemblée se sépare, le comte de Clermont est entré et a dit au président que le lendemain 22 gentilshommes se joindraient à l'assemblée, et que peut-être il y en aurait un plus grand nombre;" *Lettre d'un membre de l'assemblée nationale*, June 24, 1789, p. 39: "La séance a donc été levée, et une partie des notres étaient déjà sortis lorsque le Comte de Clermont-Tonnerre est venu nous annoncer que le Duc d'Orleans et la minorité de la Noblesse feraient demain la jonction avec nous." Biauzat, II, 140, writing at midnight of June 24, said: "J'ai appris que la minorité de la noblesse se rendra chez nous demain;" Branche, a colleague of Biauzat, wrote a letter June 24 (Biauzat II, 138–139) in which this is found: "Je suis instruit que, demain, cinquante-deux gentilshommes viennent s'unir à nous." Boullé, *Documents inédits*, *Revue de la révolution*, XIII, 74, says it was announced before the session closed that the minority of the nobles would unite the next day.

[1] *Procès-verbal . . . de la noblesse*, 249.

[2] *Ibid.*, 239. The deputation was voted on June 17.

to the chamber that on Saturday, June 20, while the sessions were suspended, the king had set Sunday as the day on which he would receive the deputation from the nobility. Accordingly, the president named a group of forty-one nobles, including himself, the Duke of Croy, who was the vice-president, and five of the six secretaries. Their reception occurred at six o'clock in the evening of June 21.[3] It is significant to recall that this was the night when Necker's plan was so violently opposed in the king's council. It seems not unlikely that the uncompromising attitude of the nobility toward the third estate, expressed in the discourse presented by the delegation, may have been one of the reasons why Louis XVI backed the opponents to Necker's project in the council, held later that evening.

The discourse[4] in general is most flattering in tone toward the king, but severely hostile to the third estate, who are charged with usurping the rights of king, nobles and people, as the text discloses. It begins with a eulogy extolling the king: "The order of the nobility at last is able to bear to the foot of the throne the solemn homage of its respect and love. The goodness and justice of Your Majesty have restored to the nation, rights too long disregarded. It is sweet for us to be able to present to the most just, to the best of kings, the striking testimony of the sentiments which animate us. Interpreters of the French

[3] *Procès-verbal . . . de la noblesse*, 250–251. The names of the members of the deputation follow: Duc de Croy, vice-president; Marquis de Bouthillier, Président d'Ormesson, De Chailloué, Comte de Serent, Marquis de Digoine (secrétaires); Marquis de Mirepoix, D'Eprémesnil, Comte de Choiseul d'Aillecourt, Marquis d'Ambly, De Bressey, Vicomte de Ségur-Cabanac, Comte de Richier, Cazalez, Comte d'Escars, Vicomte de la Queüille, Baron de Noÿelles, Comte d'Antraigues, Comte de Toulouse-Lautrec, Marquis de Clermont d'Amboise, Comte de la Gallaissonniere, Comte de la Chastre, Baron d'Allarde, Baron de Coiffier, Marquis de Loras, Marquis d'Avaray, Duc d'Havré, Duc de Villequier, Comte de Malartic, Marquis de Saint-Simon, Marquis de Causans, Marquis de Saint-Mexant, Marquis de Juigné, Comte d'Estagniol, Baron de Poüilly, Comte de Montjoye, Coma Serra, Président de Grosbois, Vicomte du Hautoÿ, Vicomte de Rafelis-Broves. All names have been verified by comparison with the list in Brette, *Les Constituants.*

[4] *Procès-verbal . . . de la noblesse*, 247–248; *Etats-généraux, Extrait du journal de Paris*, I, 91–93.

nobility, we swear to Your Majesty in its name, an unlimited gratitude and an inviolable fidelity to your sacred person, to your legitimate authority and your august house. These sentiments, Sire, are, and will be forever, those of the order of the nobility. Why is it necessary that sorrow should be mingled with the sentiments with which it is filled!"

Then the speech dealt with the point at issue between king and nobility, the plan for the verification of credentials: "The ministers of Your Majesty presented to the conferences in your name a plan of conciliation. Your Majesty asked that it be accepted, or some other; you permitted that fitting precautions be added to it. The order of the nobility has taken them, Sire, in harmony with true principles; it has presented its decree to Your Majesty; and it is this decree that Your Majesty appears to have seen with sorrow. Your Majesty would have desired to find more deference there . . . . Ah, Sire, it is to your heart alone that the order of nobility appeals. Deeply touched, but ever faithful, always pure in our motives, always true in our principles we will preserve, without doubt, claims to your kindness; your personal virtues ever build up our hopes."

The crimes of the third estate were next emphasized: "The deputies of the order of the third estate have believed that they could concentrate in themselves alone the authority of the estates-general. Without awaiting the concurrence of the other two orders and the sanction of Your Majesty, they have believed that they could convert their decrees into law; they have ordered that they be printed and distributed in the provinces; they have declared null and illegal taxes actually existing; they have consented provisionally for the nation to the limitation of the duration of these taxes. Without doubt, they have thought that they could assume rights vested in the king and the three orders."

Against such illegal procedure, they appealed to the king, basing their plea, not upon self-interest, but upon the interests of all: "It is in the hands of Your Majesty that we place our protestation and opposition to such pretensions. If the rights which we defend were purely personal, if they concerned only the nobility, our zeal in claiming them, our constancy in up-

holding them would be less energetic. They are not our interests alone which we defend, Sire, they are yours, they are those of the state, finally, they are those of the French people."

The address closed with an ardent protestation of their loyalty to the king and of their sincere desire to co-operate in the great work for which they had been summoned: "Sire, patriotism and love of their kings have always characterized the nobility of your realm. The mandates which they have given to us prove to Your Majesty that they are the heirs of their fathers' virtues. Our zeal, our fidelity in executing these, prove to them, as well as to you, Sire, that we are worthy of their confidence. In order to merit it still more, we will occupy ourselves unceasingly, with the great objects for which Your Majesty has convoked us; we will never have a desire more ardent than that of co-operating for the welfare of a people, upon the love of whom Your Majesty has set his heart."

Such a statement of good will must have reacted most favorably upon the king. His speech, although not less flowery, was tempered by an appeal for their support of the scheme for conciliation, then being developed. But in view of their ardent protestations of affection for his person and their bitter animosity toward the third estate, he might feel justified in believing in the nobility's readiness to sanction whatever might be done to thwart the usurpations of the national assembly. Certainly, the address must have given the opposition courage to force through their modifications of Necker's plan in favor of the privileged classes. After assuring the delegation of his belief that patriotism and love for their kings had ever characterized the French nobility, the king went on to add: "I receive with deep feeling the new assurances which they have given me of these. I recognize the rights attached to birth. I will ever know how to protect and defend them. I shall know, at the same time, how to maintain, for the interests of all my subjects, the authority which has been confided to me and I shall never permit it to be altered. I count upon your zeal for the country, your attachment to my person; I expect, with confidence in your fidelity, that you will adopt the views of conciliation with which I am occupied for the welfare of my

people. You will thus add to the title, which you already have, to their attachment and consideration."[5]

It was highly appropriate, that, at the end of this report, the president should have laid on the table the king's discourses and declarations, sent as true copies by M. Laurent de Villedeuil, secretary of state.[6] Doubtless, these had been in part the product of the influence of the nobility. They were read to the chamber,[7] but before any action upon them occurred, the committee of verification reported favorably upon the credentials of two members, the Chevalier de Chalon from the *sénéchaussée* of Castelmoron and the Comte de Panetier, from the *sénéchaussée* of Couserans, both of whom were granted a seat.[8]

Just what occurred next is not clear from the minutes of the nobility, but the proposal evidently had to do with the king's declaration. One of the deputies made a motion, said to have been strongly supported by one of his co-deputies, both asserting that the proposal was a necessary consequence of the king's first declaration. Unfortunately the text of the motion is not given, but several deputies maintained that it was wholly foreign to the declaration. After some discussion, the previous question was called for, to ascertain whether it was necessary to deliberate upon the motion at this time. By the ensuing vote, 193 to 58, the motion was shelved,[9] and the assembly returned to the examination of the declaration.

To facilitate this work, a deputy proposed to submit the preliminary examination to the ten bureaus into which the chamber was already divided, that the assembly might be aided in deciding more promptly upon the action to be taken relative to the declarations. Another deputy pointed out that the second declaration, which simply gave notice of the king's beneficent intentions, did not require immediate consideration,

[5] *Procès-verbal . . . de la noblesse*, 251; *Etats-généraux, Extrait du journal de Paris*, I, 93–94. The sentiments expressed are similar, in many respects to those found in the concluding paragraphs of the first discourse delivered on June 23, by the king.

[6] *Procès-verbal . . . de la noblesse*, 251–252.

[7] *Ibid.*, 252.

[8] *Ibid.*, 262.

[9] *Ibid.*, 262–263.

and suggested that only the first should receive attention by the bureaus. Both proposals were adopted by a very large majority. The bureaus were notified to meet at six o'clock that same evening to examine the first declaration, and to draft the project of a decree based on the results of their work. The chamber adjourned until the next day at nine o'clock.[10]

The nobility showed no haste in approving the king's declarations, but that they would accept them was very likely. Support of the policy of the third estate by any considerable number of the nobility seemed a very remote probability. Nevertheless, the important event of the session of the national assembly on June 25 was to be the union of the minority of the nobles.

VII

That the clergy had once joined the assembly increased the probability of its doing so again after June 23, but the adhesion of the nobility, even in small part, who had shown little inclination toward the third estate seemed to have greater significance, occurring, as it did, after the royal session in which everything had been done in the interests of the upper classes. Besides the nobles, several more of the clergy followed, on June 25, the example of the majority of their order. Some of these, in making explanation of their action, merely stated their desire to be with the majority; others said they came to end the divisions existing among the estates that the objects for which they had been convoked might be taken up; and others had joined the assembly because of changed instructions.

The minutes show that immediately after the opening of the session four *curés* appeared, one of whom bore a declaration from a fifth.[1] M. Tridon, *curé* of Rongères and deputy from the *sénéchaussée* of Moulins, explained, in submitting his credentials, that he came because the circumstances were such that the estates-general must be held and that it was obligatory upon those composing it to adopt any means which would remove

[10] *Procès-verbal . . . de la noblesse*, 263.

[1] *Procès-verbal*, No. 7, 1.

and prevent divisions and would unite the three orders in the same opinion, forming the national assembly. Otherwise, he would feel himself morally responsible for the baneful disorders to which the state and the church would be a prey, if these difficulties were not anticipated by prudent deliberation of the estates. On the other hand, although he felt the moral necessity of uniting the two orders, he did not agree that verification in common was the only means to that end. Personally, he had deemed the plan proposed in the king's name sufficient for that end, but he expressed his willingness to yield to the majority of his order which he no longer doubted was within the assembly for the purpose of common verification.[2] Very clearly this man had not embraced the broader policy of the national assembly, but his general attitude was such that we cannot doubt that he would follow when occasion demanded.

M. Gueidan, deputy of the *bailliage* of St. Trivier, presented the declaration of his colleague, M. Bottex, *curé* of Neuville-sur-Ains, deputy of the *bailliage* of Bresse. Bottex stated that he was too ill to appear in person, but that he wished his credentials submitted and he promised to abide by any action the assembly might take in regard to them.[3]

Another of this party, M. Vallet, *curé* of Gien and deputy from that *bailliage*, explained his absence as the consequence of the circumstances of his election and of the redaction of his cahier. He said that, when it came to this latter task, he asked the clergy if they did not wish to unite with the nobles and third estate of Gien to complete this work together. But the clergy refused and proceeded alone. As a result, he had felt that he was fulfilling his constituents' will in remaining in the hall of the clergy and asking separate verification for the credentials which had not been framed in common. Despite the circumstances of redaction, however, his instructions were for common deliberation and vote by head. Then he went on to explain that he had come to the assembly at the earliest opportunity, for on June 19, when the clergy voted to join the third

[2] *Procès-verbal,* No. 7, 1–3.

[3] *Ibid.*, No. 7, 3–4.

estate, he had been in Paris, where he had remained until June 24.[4]

The other members of this group, M. Rouph de Varicourt, deputy of the bailliage of Gex, evidently made no statement. Two more of the clergy, M. Perier, *curé* of Etampes and representative of the bailliage of the same name, and M. Dumouchel, rector of the University of Paris and deputy from the capital, who had arrived at the same time, made addresses to the assembly.[5] Duquesnoy wrote that the rector's coming created a great sensation in the assembly[6] and the statement may well be credited, for he represented the thought and the influence that the assembly needed for its support. In his speech, Dumouchel made very clear the reasons for his coming. He had been much disturbed by the unfortunate discussions which

[4] *Procès-verbal*, No. 7, 4-5; *Souvenirs de l'abbé Vallet, député de Gien à l'assemblée constituante* (in *Nouvelle revue rétrospective*, April, 1902, 240; May 1902, 313). This account runs thus: " Le 20 juin, le roi avait fait fermer la salle du clergé et des deux autres ordres, pour tenir une séance royale le 23. Le curé de Gien fut, pendant ce temps, visiter le château et la machine de Marly, ainsi que Louveciennes. A son retour à Versailles, il apprit que MM. Janson et Bazin, députés du tiers pour le bailliage de Gien, avaient écrits à M. Fernault et Meffe, Chanoines de Gien, conjointement avec M. Paultre des Epinettes, député d'Auxerre et originaire de Gien, que le curé était un mauvais citoyen qui ne voulait pas se rendre au tiers pour y faire vérifier ses pouvoirs. Ces deux chanoines l'annoncerent à toute la ville; les mauvaises têtes s'animerent de telle sorte, que le curé fut pendu en effigie dans le faubourg du Champ, dans sa paroisse, à la porte d'un marinier nommé Fougere. Le vicaire ayant tout découvert, l'écrivit au curé, qui fit un mémoire imprimé, comme on le vera par la suite, en son temps . . . jusqu'au 25 il passa au tiers un certain nombre d'ecclésiastiques, qu'il ne se trouva plus que la minorité du clergé dans la salle de cet ordre. Alors Mgr. l'évêque d'Auxerre et l'abbé Maury, d'après les cahiers du curé de Gien qu'ils connaissaient lui direct que d'après l'ordre de ses commettans, il était obligé de suivre actuellement la majorité puisqu'elle se trouvait aux communes; et il s'y rendit sur-le-champ." Then follows the text of his speech. Bailly (I, 230–31) recounts the following incident relative to the union of the *curé* of Gien who said his cahiers were for vote by head. " Comme il y avait quelque doute à cet égard sur les intentions du clergé, qui n'avait annoncé d'abord que celle de concourir à la vérification commune des pouvoirs, je saisis cette occasion d'explication: je lui dis: " Vous vous réunissez donc dans cette salle pour toujours? " Sa reponse affirmative fut suivre des applaudissements de toute l'assemblée."

[5] *Procès-verbal*, No. 7, 5.

[6] Duquesnoy, I, 130.

had divided the orders and by the loss of valuable time in such debates—time for which the deputies were responsible to the nation. He continued that he had been long restrained from any action hostile to the conditions imposed by his constituents in the hope that the various plans of conciliation discussed would effect an understanding. But this hope having failed, he could not longer persist in a separation opposed to reason as well as to the country's interest. Then with a glowing tribute to the wisdom of the assembly, and a fervent wish that, following in its track, he might be able to serve the country and a king who knew no other happiness than that of his subjects, he gave way to M. Perier.[7] The latter briefly stated that his presence was the outcome of new instructions, replacing his original ones which prescribed vote by order.[8] A little later, Estin, prior of the abbey of Marmoutiers in the *généralité* of Tours, also entered.[9]

Although the assembly gladly gave a hearty reception and a willing ear to the explanations of the clergy, the addition of these eight[10] deputies was of slight significance as compared with

[7] *Procès-verbal*, No. 7, 5–6; *Point du jour*, I, 50.

[8] *Procès-verbal*, No. 7, 6.

[9] *Procès-verbal*, No. 7, 17. Dom Estin's entrance is recorded after the account of the coming of the minority of the nobles. Biauzat (II, 140) merely names him as among those that came, not saying when. The *Point du jour* (I, 50) mentions him after the coming of the minority of the nobles. The rector of the university of Paris and the other *curés* are also mentioned. But, evidently, this account makes the coming of these clerical deputies incidental without attempting to explain when or how they came. Duquesnoy (I, 130) refers to all the clerical deputies after the union of the nobles and the affair of the deputation to the king. *Assemblée nationale* (I, 220) mentions Estin among the clergy that came.

[10] *Etats-généraux, Extrait du journal de Paris* (I, 109) gives the number as nine as does also the *Mercure de France: Journal Politique de Bruxelles*, No. 27, 41. The *Procès-verbal* (No. 7, 1–7) gives the names of seven clergy who came in person and one other who sent his credentials, making the eight. Biauzat (II, 140) says: "Six membres entre lesquels se trouvent un Génovésain, un Bénédictin prieur de Marmoutiers et le recteur de l'université de Paris" came. The *Point du jour* (I, 50) names "le recteur de l'université de Paris," "trois autres curés, et le prieur des bénédictines de l'abbaye de Marmoutiers," making five in all. Duquesnoy (I, 130) says: "quatre curés" and then names the "recteur de l'université (Dumouchel) et un bénédictin (Dom Estin), prieur de Marmoutiers, making six. The *Assemblée nationale*

the coming of the nobles between ten and eleven o'clock.[11] It was rumored and even semi-officially announced to the assembly the evening before that this union would take place[12] and this

(I, 220) has six: "Trois curés se sont rendus à la salle nationale." "Un autre curé s'y est rendu également," who, from the explanation he made of changed credentials, we identify as M. Perier, whose speech is given in the *Procès-verbal* (No. 7, 6–7). Besides these four, the prior of Marmoutiers and the rector of the university are named. Boullé (*Documents inédits*, *Revue de la rév.*, XIII, 76) gives six. Thus four accounts give six, the *Point du jour*, five, the *Journal de Paris*, nine, the *Procès-verbal* eight, while the *Courrier de Provence* does not mention them at all. Since the *Procès-verbal* gives the names or speech in every case, we may accept that number as correct. That the one man merely sent his credentials, might account for his being passed over by witnesses who were perhaps depending upon sight to note how many there were. Then another evidently made no speech, at least, the *Procès-verbal* does not record any from Rouph de Varicourt, so perhaps he was not noticed. Furthermore, the attention of the assembly was being taken up by other matters. Boullé, the *Procès-verbal*, Biauzat, and the *Assemblée nationale* all treat the clergy's coming as the first event of the session; the *Point du jour* and Duquesnoy mention these deputies after the entrance of the nobles. But it can be seen that the union of the nobles would be considered important enough to subordinate this other to it. The situation may have been this: Some *curés* did come at the opening of the session, but others, as the prior of Marmoutiers, did not enter until after the arrival of the nobles.

[11] Boullé (*Documents inédits*, *Revue de la rév.*, XIII, 76) says at half past ten; *Procès-verbal* (No. 7, 7) says of the time: "A dix heures" and has the session opening at nine o'clock. The *Point du jour* (I, 49) gives the time as "hier à onze heures." The *Assemblée nationale* (I, 220) has this: "La séance s'est ouverte à dix heures" and (I, 220) "sur les onze heures la minorité s'y rendit." Duquesnoy does not refer to the time nor does the *Courrier de Provence*. Perhaps the session was formally called about nine o'clock, the usual hour, but it may be that nothing official was immediately transacted, thus accounting for the statement of ten o'clock in the *Assemblée nationale*. If several of the clergy came and made speeches before the nobles arrived, evidently it must have been between ten and eleven o'clock when the latter came, thus accounting for some sources saying ten o'clock, the others eleven. Biauzat (II, 140) wrote that the nobility "est arrivée au moment de l'ouverture de la séance," perhaps indicating that the opening had been deferred to a later hour than the usual nine o'clock.

[12] Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 14; *Lettre d'un membre de l'assemblée*, 39; Duquesnoy, I, 127; Biauzat, II, 140; Branche, in a letter under date of June 24, 1789, quoted in a footnote to Biauzat (II, 139) also gives this. As one of Biauzat's colleagues, he may not be independent as to this matter.

consummation was the occasion for the deepest enthusiasm on the part of the assembly, which gained by so much in its contention against the reactionary policy of the government. The story goes that because of the narrowness of the corridors, the nobles were forced to enter one by one[13] and that at the appearance of the first, cries of "Long live the country! Long live the king!" burst forth and were renewed again and again. Affecting scenes, where tears of gladness fell and the most tender sentiments were displayed toward the nobles known to the commons—if we may believe Duquesnoy—attested the significance of their coming in the eyes of the assembly.[14] The assembly might well feel proud of the addition to their number, for among the forty-seven[15] that came were the most celebrated names of the nobility of France, members of the parliaments, and even a prince of the blood.[16]

[13] *Assemblée nationale*, I, 222.

[14] *Ibid.*, I, 222; *Point du jour*, I, 49; Duquesnoy, I, 128–29; Jallet, 103; *Courrier de Provence*, *Lettre XIII*, 33.

[15] The list given in the *Procès-verbal* (No. 7, 9–12) includes forty-seven names. The *Assemblée nationale* (I, 223) says forty-seven and gives part of the names, some of which, as the Marechal de Broglie and the Vicomte de Mirabeau are incorrect. Jallet (103) says forty-seven. Duquesnoy (I, 128) has "une quarantaine," but later speaks of the "45 dissidents." The *Point du jour* (I, 49) agrees that there were forty-seven, but under the date of June 26 (I, 60) it gives a list of the nobles that had joined. There are found forty-nine names, including the Comte de Crécy, who had joined that day. Thus forty-eight would be left for June 25. But a mistake has been made, apparently, whereby one name has been divided, making two: "Le marquis de Lazay," and "Leze marnesia." In Brette (*Les Constituants*, 241) only this name is found: "Lezay-Marnésia (Claude-Francois-Adrien, Marquis de). Noblesse, Lons-le-Saunier. Boullé (*Docs. inédits*, *Revue de la rév.*, XIII, 76) gives forty-seven, as does *Etats-généraux*, *Extrait du journal de Paris*, I, 109. Jefferson (II, 486) in Versailles that day heard there were forty-eight. Dorset (I, 224) gives forty-nine, while Bailli de Virieu (103) refers to *quarante*.

[16] Duquesnoy, I, 129–131; Biauzat, II, 140; Jallet, 103; *Assemblée nationale*, I, 222–223; Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 76; *Etats-généraux*, *Extrait du journal de Paris*, I, 109; Dorset, I, 224, Jefferson, II, 486; Bailli de Virieu, 103. Apropos of the excitement aroused by the appearance of the Duke of Orleans, the following incident is reported: "Lorsque ces messieurs se rendirent à l'assemblée, le duc d'Orléans fut applaudi avec une sorte de délire par des peuple qui entourait la salle, "Mes amis," disait-il, en mettant. la tête à la portière de sa voiture," je vous en prie, point de bruit actuellement;

The dissenters had apprised the rest of their order of their intentions and explained the motives for their desertion in a letter to the Duke of Luxemburg, who presided over the nobility. They stated that while they respected their order and its rights, they regarded it as an indispensable duty to go to the hall where the plurality of the estates-general was found, that they might give to the nation a proof of their zeal and to the king a testimonial of their devotion in accepting the step that he considered so necessary to the welfare of the state. Their chief desire was to see the remainder of their order take this view of the situation. But for themselves, as public men and the representatives of all France, which called for the estates-general, stern duty had impelled them to this course which they regarded as the grandest act of devotion of which the love of country rendered them capable.[17]

From this statement of their position, it is clear that the minority of the nobles was committed generally to the procedure

je veux votre bon heur; ja vais m'en occuper de tout mon pouvoir; vous applaudirez ce soir, si vous voulez." Found in *Essais historiques sur les causes et les effets de la rév. de France* . . . par C. F. Beaulieu, I, 257.

[17] Duquesnoy (I, 130) states that such a letter was sent; the *Courrier de Provence* (*Lettre XIII*, 23–24) gives the text of this letter as an annex to this number; *Procès-verbal des séances de la chambre de l'ordre de la Noblesse*, June 25, 1789, p. 264. The nobles themselves requested that this letter should be printed. Under date of Versailles, June 25, the following note was sent to the editors of the *Journal de Paris:* " Nous nous sommes déterminés, MM., à nous transporter ce matin à la salle des États-Généraux. Nous rendons très incessamment un compte public de notre conduite, et nous vous prions d'insérer cette lettre dans votre Journal, afin que nos commettans soient promptement instruits de notre démarche et de notre résolution de leur en soumettre les motifs.

Nous avons l'honneur d'être, etc.
Signe: Stan. de Clermont-Tonnerre du Pont;
le Duc de la Rochefoucauld; le Comte de
Rochechouart; le Comte de Lally-Tolendal;
Dionis du Séjour; de Lusignem; le Marquis
de Montesquiou, Députés de Paris."

Quoted in *Etats-Généraux*, *Extrait du journal de Paris*, des 24, 25, 26, 27 Juin 1789, I, 108. The full text of the letter addressed to the order by the minority is given in the *Mercure de France: Journal Politique de Bruxelles*, No. 27, 44–46.

outlined by the king and not to the newer and broader idea of regeneration through the representatives of the nation. While not so strongly portrayed in the speech of the Count of Clermont-Tonnerre to the assembly, still the same ideas are noticeable. The impulse of conscience and the fulfillment of a duty were the motives he imputed to the nobles who had come. But the very conscience which had forced them to this step held back a larger number of their brethren, bound by instructions more or less imperative, but dominated by motives as pure as their own. He continued by acknowledging the gratitude the minority felt for the assembly's glad welcome. Then he announced their firm adherence to the assembly in coming to work with the third estate for the regeneration of France, a labor conditioned, however, by the degree of activity permitted each individual.[18]

To this candid statement, Bailly replied in a manner equally frank. "Gentlemen," he began, "your presence here spreads

[18] Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 76; *Etats-généraux*, *Extrait du journal de Paris*, I, 109; *Procès-verbal*, No. 7, 7–9; *Courrier de Provence*, *Lettre XIII*, 15, 16. The speech is given at the close of this number. It may have been drawn from the *Procès-verbal* or probably it was obtainable elsewhere. The *Assemblée nationale* (I, 226–27) reports the speech after the roll-call, but it seems that naturally this explanation would precede the roll-call. In Duquesnoy (I, 128) the text was suppressed by the editors. The *Point du jour* (I, 49) contains a short summary. Jallet (103) merely makes mention of the speech. In his *Histoire de l'assemblée constituante* (I, 35–36, footnote) Alexandre de Lameth, one of the nobles who joined the national assembly on June 25, tells the story of how the vacillating Clermont-Tonnerre was really forced to unite with the assembly through the influence of some of the members of the "société de Virofley," a club which took a prominent part in the political life of that day. He says of the society and Clermont-Tonnerre: "A l'ouverture des états-généraux, elle loua une maison de campagne du bout de l'avenue de Versailles, à Virofley. Elle y donnait souvent des dîners à divers députés de la noblesse et des communes. Clermont-Tonnerre en faisait partie; il vivait dans l'intimité de M. Necker, partageait plusieurs des idées de ce ministre, et surtout ses hésitations. Aussi, le jour même où la minorité de la noblesse arrêta qu'elle se réunirat aux communes, il était encore tellement indécis, qu'il s'en serait probablement séparé, si plusieurs des membres de la société de Virofley n'avaient été chez lui le matin lui rappeler la nature de leurs engagemens antérieurs. Alors il se décida, entra dans la salle des communes à la tête de la minorité et, comme premier député de Paris, il porta la parole."

consolation and joy. We said in receiving the members of the clergy that there still remained some desires to be formed because some brothers were absent from this august family. These desires," he added, "have been fulfilled almost as soon as they were formed. We see here an illustrious prince, an important and respectable portion of the French nobility. We give ourselves up to the joy of receiving them; to the hope of seeing the whole body of this nobility united. Those who are still absent will join us, all our brothers will come to this place. Reason and justice, the interest of the country call them and guarantee to us that they will come.

"Let us," he exclaimed in conclusion, "work together for the regeneration of the realm and the welfare of the people; let us carry the truth to the foot of the throne and its voice will be heard by a king whose confidence may be deceived but whose intentions are just and his goodness unchangeable."[19] This peroration of the worthy president called forth much applause from the assembly which was ever sensitive to such views.[20]

As in the case of the Archbishop of Vienne, June 24, the Count of Clermont-Tonnerre was placed at Bailly's left,[21] thus recognizing in a most conspicuous manner the existence of orders within the national assembly despite all the acts destructive of such divisions. Yet an incident occurred later in the day, in reference to which the assembly absolutely refused to recognize any order outside its jurisdiction. The minority of the clergy wished to open negotiations with the assembly by sending a deputation, but Bailly answered that he recognized no clergy except those within the assembly. If the rest of the members

[19] *Procès-verbal*, No. 7, 8–9; *Courrier de Provence*, *Lettre XIII*, 21–22; Duquesnoy, I, 129; Biauzat, II, 140; *Assemblée nationale*, I, 227–228. The first two and the *Assemblée nationale* give full texts of the speech.

[20] *Assemblée nationale*, I, 228. In giving accounts of Clermont-Tonnerre's speech and Bailly's reply, this paper says: "On y repondit de part et d'autre par les acclamations les plus vives." Duquesnoy (I, 129), remarks: "M. Bailly lui a repondu d'une manière noble et simple, et avec une grande effusion de sentiment." Biauzat (II, 140) wrote: "Notre président y a répondu en académicien qui a l'ideé juste. Nous sommes tous très contents de la manière dont il se tiré de toutes ces missions imprévues."

[21] Duquesnoy, I, 129; Bailly, I, 234.

of the order wished to come to have their credentials verified in common, the assembly would gladly welcome the minority.[22] But whether or not the assembly intended to recognize the existence of orders by its action relative to the Archbishop of Vienne and the Count of Clermont-Tonnerre, it proceeded to carry out, as quickly as possible, its policy of common verification. The roll of the nobility was called and those who were present submitted their credentials.[23] At the reading of the name of the Duc d'Orléans, it is said the hall rang with shouts and applause and that similar manifestations were made for the Count of Montmorency, the Duke of Rochefoucauld and Count Lally-Tolendal, but that the name of the absent D'Eprémesnil was hissed as that of Abbé Maury had been the day before.[24] Outside the hall, this man seems to have been the target of popular disapproval and to have escaped from violent handling only through the efforts of some of the third estate, who forced his tormentors to withdraw.[25]

In the light of contemporary evidence, the significance of these two days of June 24 and June 25 cannot be too highly emphasized. One enthusiastic journalist wrote that "no citizen, no worthy Frenchman ought ever to forget these two great days; that the union of the clergy and of the nobility ought to be immortalized in our calendar. Since the foundation of the monarchy, it had been desired; division has caused the mis-

[22] Duquesnoy, I, 131; Barmond, *Récit*, 272–273; Coster, *Récit*, 343. The last states that this incident occurred on June 26, but evidently it occurred June 25.

[23] Duquesnoy, I, 131; *Procès-verbal*, No. 7, 10–12; *Point du jour*, I, 49–50; *Assemblée nationale*, I, 223–24; *Bulletin d'un agent secret*, No. 47. (*La révolution française*, XXIV, 72.)

[24] *Point du jour*, I, 50. This account says that names such as the Duc d'Orléans, the Marquis de la Fayette, and many others were cheered. Duquesnoy (I, 130) refers to the Duc d'Orléans and then names " Mm. de Montmorency, de la Rochefoucauld, de Rochechouart et de Lally " as having been applauded. The *Assemblée nationale* (I, 223–224) mentions the Duc d'Orléans and indicates that the roll-call was accompanied by a great deal of applause. Duquesnoy (I, 132) and *Bulletin d'un agent secret*, No. 47 (*La révolution française*, XXIV, 72), tell of the attitude toward D'Eprémesnil. *Etats-généraux*, *Extrait du journal de Paris*, I, 109.

[25] Duquesnoy, I, 132.

fortune of the nation; it is the source of its degradation; it has fixed abuses in our midst. May these two great days, forever memorable, be the dawn of those that shall witness our happiness and our liberty."[26] Biauzat was profoundly impressed by the action of the nobles. "These gentlemen," he declared, "showed themselves as brave at that moment as they ever could have been at the head of the army. since they rose above the prejudice sustained by the ministerial system, by the example of their comrades, and by their own individual interests, even by the apparent desire of the monarch whom the ministers deceived.[27] Duquesnoy, who was very conservative in his views, noted that the presence of the clergy and nobility gave the assembly an appearance of dignity and caused a gravity hitherto unknown. "I firmly believe," he wrote, "that this is going to force a complete union; it is impossible, to my mind, for the minority of the clergy to remain alone, very difficult for the nobility not to come. It is no longer the question today of rigorously calculating our rights, of weighing them in an exact balance; it is necessary to save the state, to snatch it from an imminent peril and to reaffirm the royal authority, sapped to its roots by the detestable and infernal operation of June 23. Some names already dear to the country will become more dear.

It is impossible that the most virtuous men of the realm, as Rochechouart, La Rochefoucauld, etc., are guided by sentiments other than those of imperious duty; it is impossible that Montmorency, Lameth, Crillon, have any other motive than that of honor."[28]

The discourse of the Marquis of Sillery,[29] who asked to speak

[26] *Assemblée nationale*, I, 222–223.

[27] Biauzat, II, 140.

[28] Duquesnoy, I, 131.

[29] *Procès-verbal*, No. 7, 12–15. The text of the speech is given in full here. The *Point du jour* (I, 50) says: "Sa modestie s'est refusée à publier un discours très patriotique et très noble," but we find the text given in its entirety in the *Courrier de Provence*, *Lettre XIII*, 17–20. The Marquis must have changed his mind or it may be that Mirabeau saw the paper submitted to the secretaries, for Biauzat (II, 141) tells us that "son discours était écrit et bien fait." Then he adds: "Il parait que cet ordre est plus éclairé qu'au temps où il ne signait pas son nom, même dans les contrats." Jallet (103,

after the roll-call, would seem to justify all that was believed of the exalted patriotism, high integrity, and genuine enthusiasm for the nation's good ascribed to the nobility. He began by referring to the gratification the nobles felt at meeting again compatriots whom they had come to know and honor in the provinces and by saying that the nobles asked from their fellow-citizens the same sentiments as were entertained for them. "We do not seek to boast," he declared, "that we have preceded, perhaps by a few days, the coming of the remainder of the nobles into this hall; the severity of some of their instructions, the examination of the plan proposed by the king, prevent them from joining us yet; but the spirit of justice and the love of the public welfare which direct them will doubtless soon force them into our midst." He appealed to the assembly to forget the first moments of disquietude that had divided them and to let the world see that the French nation had preserved its ancient character.

"Carried away by our passions, gathered from all parts of this vast empire, having various interests to protect, holding to our opinions and wishing to imperiously maintain them . . . ," such circumstances, he felt could but result in the effervescence that for some time had agitated them. "But let us view the tempest with a calm and serene eye," he urged, "that our spirits may be quieted in proportion to the dangers which surround us; let us cast an attentive eye upon all the abuses which we must reform; let us have before us only the happiness of the people confided to us and let these sacred motives be the rallying point of our hearts and of our thoughts."

The theme of devotion to the king was next touched upon, of devotion to a king, "so worthy because of his personal virtues,

104) says of the speech: " M. le marquis de Pilleri fit un excellent discours, repli de sentiments patriotiques." He has the name wrong or it has been printed incorrectly. Jallet noted that " Il fit éloge des curés, de toutes les classes de citoyens qui composaient les députés des communes et même des laboureurs; il ne dit pas un mot des prélats." Duquesnoy (I, 130) mentions that the marquis made a speech, but before the roll-call, while the *Point du jour* and the *Procès-verbal* note that it was after the roll-call. *Etats-généraux, Extrait du journal de Paris*, I, 109. This source refers to the speech after the roll call. *Mercure de France: Journal Politique de Bruxelles*, No. 27, 43–44.

of being forever the object of affection by his people. He calls us his children: Ah! without doubt, we should regard ourselves as a united family, having varied interests in our paternal household. He offers us peace: let us accept it without hesitation, that he may not see the olive branch which he offers us, fade and wither away in his hands." To the first order of the state, he likewise paid high tribute. "It is in the presence of the assembled nation that we render to the clergy the homage due to its virtues." Then continuing, he said: "the great number of you, gentlemen, witnesses of the sorrows and comforters of the rural inhabitants,—you will make known to us the sympathetic details of their sufferings and, by your advice, will aid us in finding the most speedy means to relieve them."

"And you, gentlemen," addressing the members of the third estate, "who embrace within your body distinguished citizens of all stations—enlightened magistrates, celebrated litterateurs, faithful merchants, clever artists—you will assist by your intelligence and your learning, in procuring for France laws necessary for the reform of the public order." Then he turned to the provincials as the men whose "respectable labors served to support and enrich the citizens of all classes. If the French nobility is proud to have the right of marching at the head of the legions for the defense of the country," he declared, "it honors to the same degree this formidable soldiery which constitutes the glory and the security of the empire." The lofty sentiments of the marquis produced a marked impression upon the assembly which showed its appreciation by applause.[30]

But before the labor and the excitement of speech-making and of roll-call attendant upon the union of the nobility were over, a great commotion was produced in the assembly by an attempt of the populace to force an entrance into the hall.[31]

[30] *Point du jour*, I, 50; Duquesnoy, I, 130.

[31] *Assemblée nationale* (I, 224) says, "L'appel n'était pas encore fini que la salle se trouva, du côté de la rue du Chantier assaillie par le peuple." The *Point du jour* (I, 49–50) has this: "On a fait l'appel des députés de la noblesse qui remettaient leurs pouvoirs pour la vérification, lorsque le peuple . . . a forcé la porte," but the paper gives some incidents of the call after the account of the attempt of the people to enter. Duquesnoy (I, 129), indicates that the disturbance preceded the roll-call. Jallet (104) and *Bulletin d'un agent*

Such an attempt can only be regarded as the natural consequence of conditions. Ever since the royal session of June 23, the hall had been completely invested with troops[32] and every day the number of soldiers in Versailles was being increased. A detachment of hussars arrived on the morning of June 25 and—if we accept the statement of the *Point du jour*—was dispersed in different quarters of the city.[33] A force of French guards that was said to have arrived at the same time as the hussars, evidently was sent to the hall of the estates, for the *Point du jour* adds that the patrols of Swiss and French Guards, as well as two squadrons of the king's body guards sent there at one o'clock, did not disappear from around the hall until about four o'clock. Furthermore, the body guards had definite instructions to use force as shown by the order of the king, given to the Duc de Guiche apparently on June 25. It ran: "I order Monsieur de Guiche, captain of my body guards, if it is necessary in Versailles, to repel force with force. Louis."[34] The extra precautions, Barentin states, were due in part to the indignities inflicted upon the Archbishop of Paris as the *Point du jour* surmises, but at any rate, the presence of a strong and increasing armed force must have been a constant source of irritation to all whose interest centered in the assembly hall.[35] In addition to this, popular feeling had been raised to the highest tension through street encounters with men believed to be antagonistic to the general welfare.[36] Furthermore, the

secret, No. 47 (*La révolution française*, XXIV, 72), both mention the attempt of the people to enter but do not indicate just when the attempt was made. The *Courrier de Provence* (*Lettre XIII*, 13) says the proposition of an address to the king to ask the removal of the troops was up when the popular attempt at forcing the door occurred. Boullé (*Docs. inédits*, *Revue de la rév.*, XIII, 76) states that the noise was heard during the roll-call.

[32] *Point du jour*, I, 50; Duquesnoy, I, 128.

[33] *Point du jour*, I, 51; Biauzat, II, 140.

[34] Biauzat, II, 140; *Point du jour*, I, 51; copy of the order is given in *La révolution française*, XXI, 538.

[35] *Point du jour*, I, 50, 51; *Courrier de Provence*, *Lettre XIII*, 13. *Lettres et bulletins de Barentin à Louis XVI*, LVIII, 25 juin, 1789.

[36] Biauzat, II, 138; *Point du jour*, I, 51; Young, 180; *Assemblée nationale*, I, 219–20; Duquesnoy, I, 128–132. He records several instances of popular hostility and vulgar jokes at the expense of the upper classes.

news of the coming of the minority of the nobility was, as some have suggested, enough of itself to arouse the people who were not certain that such a step would be permitted, but who, if it were possible, were eager to enjoy the sight.[37]

Whatever the motives that impelled them, the crowd forced the door on the rue des Chantiers[38] and some are said to have gotten inside despite the opposition of the guards, when the disturbance arrested the attention of the assembly.[39] It can well be imagined into what a predicament this threw the deputies and how very necessary it was that this delicate situation should be wisely handled. The opening of the door to the curious and interested throng would have been a public repudiation of the king's express orders on June 23; the closing of the door in the face of the crowd would have been interpreted as an affront to the people of whose good opinion the assembly had so much need, and would have caused much more serious demonstrations than those of the previous evening.[40] Something had to be done and that very quickly.

Barnave seized the moment of indecision and suspense to utter a fiery denunciation against depriving the nation of access to the national hall.[41] "It is in this august spot that its interests

[37] *Point du jour*, I, 50; Bailly (I, 223) also gives this reason, but he may have read the *Point du jour*. *Bulletin d'un agent secret*, No. 47. (*La révolution française*, *XXIV*, 72.)

[38] *Point du jour*, I, 50; *Assemblée nationale*, I, 224; Jallet, 104.

[39] Bailly, I, 233.

[40] *Assemblée nationale*, I, 224. This paper has summarized the situation very well.

[41] Duquesnoy, I, 129; *Assemblée nationale*, I, 224–25. Both of these sources state that it was the disturbance of the people which led Barnave to take the floor. Jallet (104) confirms this, for although he does not give the speech, he says that Barnave made a motion to send a deputation to the king as the means of relieving the situation. The *Procès-verbal* and the *Point du jour* say nothing of Barnave. The *Courrier de Provence*, *Lettre XIII*, 13, gives this: "La proposition d'une adresse au roi pour demander le renvoi des troupes qui environnent la salle des états-généraux, a été reprise et soutenue par M. Barnave; et il a été arrêté qu'on enverrait une députation à sa majesté; mais au moment ou l'on s'occupait de cet objet, on a appris qu'il y avait de la fermentation hors de la salle." None of the other sources indicates that the matter of a deputation to the king was taken up before the popular disturbance. The *Courrier de Provence*, evidently has the order of events reversed. The

are stipulated, its lot decided," he cried. "Thus it is in view of the nation that we should work. To surround us with troops, as has been done, is to fail in duty to the nation, to insult it in the person of its representatives. Can deliberation be carried on in the midst of arms? Are we in the midst of a camp? Yes, this much vaunted liberty, promising so much, is chimerical and of no consequence. In view of this, is it any wonder that the people are excited, that their spirits are inflamed and embittered, that the people revolt and that uprisings are frequent? Let the troops be removed and all will become calm and orderly."[42] Then, apparently desirous of striking at the root of the matter at once, Barnave proposed that they send immediately to the king a deputation to ask the withdrawal of the obnoxious troops. Although the motion seems to have been supported, evidently the danger in such radical action was felt. One member, said to have been a noble, proposed a temporary substitute, that of sending out to the people, the three men who stood at the head of the orders, that it might be known that the orders were united.[43] Rabaud de St. Etienne is re-

evidence seems to warrant this construction: The attempt of the people to enter, brought before the assembly the matter of the exclusion of the public. Barnave seized this opportunity to denounce the governmental scheme of guarding the hall, of which the avowed purpose was to exclude spectators. He followed up his speech by the proposal of a deputation to the king forthwith to ask that the troops be removed. But, instead of immediately acting on his suggestion, the heads of the three orders were sent out, and the matter of the deputation was taken up later.

[42] *Assemblée nationale*, I, 225. The text of the speech ascribed to Barnave is given only in this account. The Moniteur (I, 99) gives the speech, but, barring two sentences which are omitted, it is a literal copy of the *Assemblée*.

[43] Duquesnoy, I, 129; Jallet, 104; *Assemblée nationale*, I, 225–226. The latter does not mention Barnave's motion. Of the substitute proposal, Duquesnoy says: " Un membre de la noblesse a senti ce que cette démarche avait de dangereux et il a proposé que l'archevêque de Vienne, le comte de Clermont-Tonnerre, et M. Bailly se rendent à l'entrée de la salle." Jallet has this: " M. Barnave fit une motion . . . Plusieurs appuyerent cet avis. Un des membres, en l'adoptant, proposa, que M. le président et M. l'archevêque de Vienne se présentassent au peuple pour l'apaiser." The *Assemblée* gives the following: " Un membre de la noblesse dit qu'il fallait députer au peuple trois membres des trois ordres." Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 76.

ported to have added to this the suggestion that it should be announced that the assembly, always concerned for the popular interest, was going to send a deputation of the three orders to the king to ask him to grant free ingress into the hall.[44]

These suggestions seem to have been well received, for Bailly, Clermont-Tonnerre and the Archbishop of Vienne were sent outside and soon succeeded in quelling the uproar.[45] Bailly, it appears, asked the people at the door to withdraw, warning them that the assembly was going to send a deputation to ask of the king free access to the hall, and that they would surely be able to enter the next day.[46] The Archbishop of Vienne adopted the clever ruse of engaging these persons as special emissaries to go into all quarters of the city, there to restore the peace and quiet so necessary to the freedom of the assembly.[47]

Conformably to the promise made and as the resumption of a half-finished portion of the previous day's work, the assembly voted to send a deputation to the king. It was to carry the complaints of the assembly, first, that the place of its sessions was surrounded by soldiers; second, that entrance into the hall was forbidden to the public; in addition it was to represent to the king that the policing of the hall where the assembly met should be controlled by the assembly itself. The deputation was to be composed of twenty-four delegates, twelve from the third estate and six from each of the upper orders,[48] thus

[44] *Assemblée nationale*, I, 226.

[45] *Assemblée nationale*, I, 226; Jallet, 104. This account omits mention of the Count of Clermont-Tonnerre. Duquesnoy, I, 129; *Point du jour*, I, 50; *Courrier de Provence*, *Lettre XIII*, 13–14; Bally, I, 233; *Bulletin d'un agent secret*, No. 47 (*La révolution française*, XXIV, 72); Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 108.

[46] *Assemblée nationale*, I, 226; *Bulletin d'un agent secret*, No. 47 (*La révolution française*, XXIV, 72), does not name Bailly as having used this argument, but says such a one was made.

[47] Duquesnoy, I, 130; *Point du jour*, I, 50; *Assemblée nationale*, I, 226; Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 76.

[48] *Etats-généraux*, *Extrait du journal de Paris*, I, 110; Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 76; *Procès-verbal*, No. 7, 18–19; *Point du jour*, I, 51; Duquesnoy, I, 130; *Assemblée nationale*, I, 229; *Courrier de Provence*, *Lettre XIII*, 13. This matter of naming the deputation was taken up, evidently, some time after the popular disturbance. The *Courrier de Provence* places

following the established ratio of representation which recognized the existence of orders. Of those who were to go, the Archbishop of Vienne headed the list of the clergy, which included also the Bishop of Coutances; Pison du Galand, Target, Mounier, Le Chapelier, and Rabaud de Saint-Etienne are to be noted among the third estate, while the Duc d'Aiguillon, the Marquis de la Coste, and the Comte de Castellane formed half of the noble delegates.[49] When he wrote on June 26, Duquesnoy said that he had been assured that the king had promised to receive the deputation, but without recognizing the title of deputation from the estates-general.[50]

As usual, a large part of the session was taken up with matters pertaining to the furtherance of the assembly's organization. The oath was administered to M. Baudouin, who had been chosen official printer of the assembly's records.[51] Committees were enlarged to keep pace with the growth of the assembly. The credentials of sixteen of the nobles were publicly verified at once, that they might be added to the committee of verification.[52] Three of these, it happened, had not produced the proper papers, but they were given two weeks to report and were granted a provisional seat and allowed to take part in debate.[53] In this committee, the principle of proportional

the discussion on the deputation before the attempt of the people to enter, but clearly it is incorrect. *Mercure de France: Journal Politique de Bruxelles*, No. 27, 46.

[49] The list given by the *Procès-verbal* (No. 7, 19) is as follows, with the spelling corrected by comparison with the list in Brette: Clergy, MM. Archbishop of Vienne, Bishop of Coutances, Abbé d'Abbecourt, De Surade, Aury, De Champeaux; Nobility, MM. Duc d'Aiguillon, Marquis de la Coste, D'Andre, D'Eymar, Comte de Castellane, De Burle; Third Estate, MM. Pison du Galland, Vigron, Arnoult, Mounier, Rabaut de Saint-Étienne, Blancard, Le Chapelier, Target, Populus, Marquis de Rostaing, Reubell, Laborde de Mereville.

[50] Duquesnoy, I, 130.

[51] *Procès-verbal*, No. 7, 17; *Point du jour*, I, 51.

[52] Boullé, *Documents inédits*, *Revue de la révolution*, XIII, 76; *Point du jour*, I, 50; *Procès-verbal*, No. 7, 16; *Courrier de Provence*, *Lettre XIII*, 13; *Assemblée nationale*, I, 299; Biauzat, II, 141; Duquesnoy, I, 130; Jallet, 103. The last named source gives the number as "douze" which is evidently a mistake.

[53] *Procès-verbal*, No. 7, 16–17.

division among the orders was carefully observed. On June 19, when the various committees were organized, the assembly chose thirty-two of its members to serve on this committee and the same number for the committee on food supplies.[54] June 22, when the clergy first joined, sixteen of them were added to the committee of verification,[55] as were the sixteen nobles in this session. But in the matter of the committee on food supplies, the usual proportion of two from the commons and two from each of the upper orders seems to have been disregarded. Only ten of the clergy were named for this, just as for the committees on redaction and on rules, each of which had twenty members from the commons.[56] After the change, all committees were notified to meet at five o'clock the same evening.[57]

The committee of verification was pushing its work as rapidly as possible, but every day was bringing new tasks. The Marquis of Toulongeon, deputy from the *bailliage* of Aumont in Franche-Comté, reported a contest relative to the deputation from that *bailliage*, which implicated himself, the Chevalier of Eclans, and Bureau de Puzy. They wished to leave the decision to the national assembly and, pending its judgment, they asked that they might not be counted in the list of nobles that had joined. Naturally, this matter was referred to the committee of verification.[58]

Four members of this committee, Grégoire, Bouchotte, Garat, Sr., and Tronchet, acquainted the assembly with the work done on credentials since the previous day.[59] The report first dealt with some members of the third estate. The papers of some deputies from Castlemoron d'Albret, and from Besançon, which had not been presented at the roll-call of June 13 and 14, had been found to be in proper form, so the assembly granted these delegates permanent instead of provisional seats. A re-examina-

[54] *Procès-verbal*, No. 2, 3–4.

[55] *Ibid.*, No. 4, 9.

[56] *Ibid.*, No. 2, 3–4; No. 7, 17–18.

[57] *Ibid.*, No. 7, 17.

[58] *Ibid.*, No. 7, 15.

[59] *Ibid.*, No. 7, 20–24. The complete report of the committee of verification is found on these pages.

tion of some seemingly illegal credentials belonging to the deputations of St. Pierre le Moutier of the city of Lyons, and to M. Ricard of the *sénéchaussée* of Toulon, had proved their legitimacy and the assembly ratified the report.

The most of the time, however, had been given to the clergy who had joined the assembly. Of these, ninety-nine had presented their true credentials and were voted full powers by the assembly, but eleven had brought papers merely announcing their election. In accordance with custom, these were granted two weeks in which to secure their proper credentials and the privilege of a provisional seat in the meantime.

In addition to this work, the day seemed to be made the occasion for a clearing up of past minutes. Those of the sessions of the afternoon of June 13 and the forenoon of June 14 were read. They contained the record of the verification of the credentials of those answering to the roll-call of June 12 and June 13 and were presented to acquaint the upper orders with what had been done. The new members appear to have recognized without question the legitimacy of the assembly's action.[60]

VIII

On the same day, while the national assembly was thus pursuing its course almost as if a royal session had never occurred, the minority of the clergy and the chamber of the nobility made the first declaration of the king the main subject of discussion. Both finally passed decrees of acceptance, but more than a hundred nobles felt obliged to explain or justify their attitude in the matter, by submitting a large number of protests and declarations. The minority of the clergy, however, evidently acted without such careful examination of the declaration and without making any individual reservations.

The session of the latter opened with the usual religious ceremony.[1] Following that, the Cardinal de la Rochefoucauld

[60] *Procès-verbal*, No. 7, 24; *Point du jour*, I, 51; *Assemblée nationale*, I, 229–230. The *Point du jour* says that the minutes of the royal session were read, but no other source refers to their reading on this day.

[1] Barmond, *Récit*, 270.

reported upon a conversation which he had had with the king the previous day, relative to the situation of affairs.[2] Whether he had been summoned by the king or whether he had sought the interview, the record does not state. Nor is there any further statement as to the subjects of the conference. It is reasonable to suppose, however, that the irregular action of the majority of the clergy, the revolutionary attitude of the third estate and the outbreak against the Archbishop of Paris engaged the attention of king and cardinal. There can be no doubt that the staunch adherents of separate assemblies must have been alarmed by the defections from their own ranks which went to swell the size of the national assembly. The fact that, despite his orders of June 23, the king had let the third estate go on its way unmolested must have been further cause for anxiety on the part of the extreme conservatives. It mattered little that the clergy who had joined the third estate were by no means in full accord with the latter's policy. In as far as possible, the commons acted upon the presumption that these deputies were in harmony with them and the people interpreted their union to mean that all gave their support to the national assembly's ideal of a single body. Hence, it was highly necessary that the supporters of the policy of separate assemblies keep the king on their side. Louis XVI commissioned the cardinal to testify to the chamber of the clergy his royal satisfaction with its course.[3] Presumably encouraged by their sovereign's approval, the clergy proceeded to their regular business.

The minutes of the previous session were read, approved, and signed.[4] Then the election of officers was completed. The candidates for the secretaryship were the secretaries *pro tem*, of the day before, Abbé de Barmond, Councillor of the Parliament of Paris, and Abbé Coster, arch-deacon and deputy of Verdun. The former was chosen,[5] and the latter states that

[2] *Ibid.*, 271.

[3] Barmond, *Récit*, 271.

[4] *Ibid.*, 271.

[5] Coster, *Récit*, 341; Barmond, *Récit*, 271. The latter does refer to Coster's candidacy.

the choice of two secretaries, the customary number, was proposed, but postponed because they still hoped for the return of their members who had gone to the third estate. To permit the co-operation of the majority, the election of a second secretary was deferred.[6] Besides the secretary, a *promoteur*, a sort of floor leader, in the person of the Abbé de Montesquieu, general agent of the clergy was elected. Both he and Abbé Barmond took immediately the oath to fulfil their duties.[7]

The *promoteur* began his work at once by stating his opinion in regard to the action to be taken upon the first declaration of the king, to which the chamber next turned its attention.[8] Without record of any debate, the clergy passed a resolution, first, to adhere purely and simply to the declaration of the king the twenty-third of June, concerning the present session of the estates-general; second, in order to be able to execute the said declaration at once, to send deputations to the other two orders, either to arrange with them the form for the communication of credentials, or to propose to them to proceed, in a genera assembly of the three orders united, to the judgment of credentials which are or may be contested.[9]

The president and the Archbishops of Aix and Rheims were commissioned to present this resolution to the king and to portray the situation in which the clergy, all of whose steps had been dictated by the purest zeal and the most inviolable fidelity, found themselves. They were exposed every day, as Coster adds, to the insults of the populace and to the slights of the third estate and of the numerical majority of the clergy, because they obeyed the king's orders and conformed to the declaration of June 23.[10]

[6] Coster, *Récit*, 341–342.

[7] Coster, *Récit*, 342; Barmond, *Récit*, 271.

[8] Barmond, *Récit*, 271.

[9] *Ibid.*, 271–272; *Procès-verbal . . . de la noblesse*, 269. The texts vary slightly in a few phrases. The first has "soit pour concerter" where the second has merely "pour concerter." The *Récit* runs "au jugement des pouvoirs" while the *Procès* has "au jugement de ceux." The variations are of a minor character which do not change the meaning of the decree.

[10] Coster, *Récit*, 342; Barmond, *Récit*, 271–272.

Before deputations were despatched to the other orders, the courriers of the clergy was sent to notify them of the action to be taken. The nobility expressed its readiness to receive the delegation which was sent at once. It was composed of the Bishops of Luçon and Nimes with Villebanois, Maury, Coster and Martinet, who soon returned to report concerning their reception and the reply of the president of the nobility. The latter assured them that the nobility ever recognized in the deliberations of the order of the clergy, the wisdom which characterized that body, and the principles upon which rested the happiness and stability of the empire.[11]

At this point, the courrier returned from the third estate and explained that the order had adjourned, but that he had seen the dean, Bailly, who told him, as already noted, that the deputa-

[11] Barmond, *Récit*, 272; *Procès-verbal . . . de la noblesse*, 268–269. The *Récit* states that six were selected to carry the decrees to the nobility, namely, the Bishops of Luçon and Nîmes, with Villebanois, Coster, Maury, and Martinet, but the record of the nobility gives the names of eight. These are the Bishop of Augoulême, the Bishops of Luçon and six abbés, namely, Damas, Maury, Villebanois, Le Pelletier, Coster, and Martinet. The speech made by its president is not given in the record of the nobility.

Apropos of this deputation, it is well to give an incident by Coster concerning his connection with it. He records it in his account of the session of June 26, saying that the decree in question was that on pecuniary privileges and states that the third estate refused to receive the deputation. Evidently he is in error, for there is no record in the *Procès-verbal . . . de la noblesse* of the sending of such a delegation to them by the clergy nor is the refusal to receive it found in the accounts of the national assembly. It was a deputation with the clergy's decree of June 25 which the third estate refused to receive. The incident touching his appointment on the committee reveals his idea of his own importance and also his implacable hostility toward the third estate. He says the president named him a member of the deputation to the third estate. At this, he rose in protest: " Qu'il n'avait encore été nommé d'aucune députation; que cependant il avait l'honneur l'appartenir à une classe de députés, la première après les évêques, savoir les archidiacres, dignitaires des églises cathédrales; qu'il avait eu l'honneur d'en faire l'observation à M. le Cardinal, il y a avait plus d'un mois; que M. de Cardinal n'y avait fait aucune attention, et qu'il le nommait aujourd'hui, pour la première fois, à une députation peu honorable; qu'l ne voulait pas faire son apprentissage par une pareille commission, et le président eut égard à ces rémontrances, l'ôta de la députation du tiers pour le mettre de celle de la noblesse."

tion would not have been received had the national assembly been in session.[12]

Rebuffed in their attempt to secure recognition of their position from the national assembly, the clergy devoted the remainder of the session to the question of pecuniary privileges. The *promoteur* seems to have put the matter before the house. The minutes of the minority state that it was their desire to take up the question of the abandonment of their pecuniary privileges, just as soon as the chamber of the clergy had been constituted. Evidently because time did not permit such action that day, the clergy agreed to make the consideration of their financial privileges one of the first matters of business on June 26.[13] By supporting the king in his efforts to relieve the financial embarrassment of the government, they might count upon his aid in other affairs of special interest to the clergy

IX

The first declaration of the king received a much more thorough examination from the nobility on June 25 than from the clergy. As soon as the minutes of the previous meeting were read, the reports of the ten bureaus upon the first declaration were made, members selected from each bureau giving accounts of the results of the examination and presenting the decrees drafted in each bureau.[1]

It was at this stage in the report from the bureaus, that the nobility learned that a group of their members had deserted the order. The president had just received the letter signed by

[12] Barmond, *Récit*, 272–273; Duquesnoy, I, 131; Coster, *Récit*, 343 June 26. As indicated above, Coster tells this incident on June 26, as referring to the decree concerning pecuniary privileges. Bailly himself had forgotten this incident when he wrote his *Mémoires* in 1792, but (V. I, 246) he makes this reference to the matter: " Le *Journal de Versailles* dit, nombre 7, *suppl.*, p. 49, que, la séance de ce jour étant levée, le courrier du clergé vint annoncer une députation des membres restés dans sa chambre. Il lui fut répondu que la séance était levée; mais que d'ailleurs, le clergé étant dans l'assemblée on n'avait aucune députation à recevoir de cet ordre. Je n'ai point mémoire de ce fait."

[13] Barmond, *Récit*, 273.

[1] *Procès-verbal . . . de la noblesse*, 264.

the thirty-seven and he interrupted the session immediately to read it to the chamber, but there is no evidence that any further notice was taken of the communication.[2] The matter before the house, the decrees of the different bureaus, again engaged their attention. In the meantime, some one had taken steps to put these projects into form for presentation. Noting their strong similarity, a deputy drafted a decree which embraced practically all the ideas of the ten individual proposals. This decree was then read to the assembly.[3]

It dealt at some length with the reasons for the nobility's acceptance of the declaration. In explanation of their motives, it said: "The order of the nobility, eager to give to the king some proof of its fidelity and its respect; moved by the persevering pains which His Majesty has deigned to take to bring the orders to a desirable conciliation; considering how important it is for the nation to profit without delay from the great benefit of the constitution, indicated in the second declaration of the intentions of the king, read at the session of the 23d of this month; urged, also by its desire to be able to consolidate the public debt, and to realize the abandonment of its pecuniary privileges as soon as the re-establishment of the constitutional bases will permit it to deliberate upon these two objects, to which the nobility attaches national honor as well as the dearest wish of its constituents; without being bound by the form of the aforesaid session, valid for the present session of the estates-general only, and without establishing any precedent for the future;"—these were the considerations which led the chamber to accept "purely and simply the propositions contained in the first declaration of the king read at the session of June 23." It is significant to note that both the upper orders were seeking a *rapprochement* with the king on the basis of renouncing some of

[2] *Procès-verbal . . . de la noblesse*, 264–265. The contents of the letter are given above in the account of the reception of the nobles in the national assembly.

[3] *Ibid.*, 266; Barmond, *Récit*, 276. There are a few unimportant textual variations in the copy given in the minutes of the nobility and that found in the minutes of the clergy, to whom the decree was communicated June 26, but these do not change the meaning.

their financial privileges. It had come to the point where they realized that concessions along this line must be made if the king were not to be thrown wholly into the arms of the national assembly. If they were willing to make pecuniary sacrifices, sufficient to place the government on a firm financial basis once more, they might hope to save all their other prerogatives, as well as those of the king, from destruction by the hostile commons. The necessities of the situation were driving the privileged classes into the arms of the king, in the belief that they could still avert the disaster which the third estate had forced upon them.

It was very natural that the last paragraph of the decree should have dealt with the solution of the problem of imperative instructions. Many of the nobility were in a position of absolute impotence under the existing circumstances. Their constituents had permitted them no latitude in interpreting their mandates so their hands were tied in the face of the crisis in the estates. The first declaration of the king offered them a way out of the difficulty, and this they proceeded to use. "In consequence of and in order to execute article V of the aforesaid declaration," they decreed "that His Majesty will be entreated to summon the nobility of the bailliages, whose deputies judge themselves bound by imperative mandates, in order that they may receive new instructions from their constituents and, moreover, may take into consideration, in the form indicated by the king, the articles contained in the second declaration of the intentions of His Majesty, which the order of the nobility regards as the most touching pledge of his justice and his love for his people."

Another project for a decree, which aimed also at the acceptance of the first declaration, was put before the chamber, but it had additional features, namely, to nominate commissioners in accordance with article XIII of the first declaration, as well as to send the decree to the other orders by a deputation and to the king by the president.[4]

The ensuing discussion led to a rather careful examination of all the articles of the first declaration, especially with respect to their relation to the mandates of the various deputies. One

[4] *Procès-verbal . . . de la noblesse*, 266.

deputy, in supporting the first decree, broached the idea of carrying it to the king and offering to him all the measures, which, as father of the country and friend of the people, he judged fitting in this decisive circumstance. Another suggested a project of the discourse which should be delivered when the decree was presented to the king, whether by the order of the nobility as a whole, by a deputation, or by the president. After more discussion they passed, as was customary, to the expression of their opinions upon the first decree; several different views were disclosed by the roll-call. Some were for adoption, others for modification and explanation, a large number favored acceptance, but with reservations, while a few acting in accordance with their instructions, refused to vote. A very small number, bound by imperative instructions, advocated rejecting it altogether.[5]

This point in proceedings had been reached when the deputation from the clergy, bearing their decrees of June 24 and June 25 relative to the first declaration, was announced. Eight nobles were sent to receive the eight clergy,[6] said to have formed the party, which was seated at the president's right. Their spokesman, the Bishop of Luçon, read the two decrees and laid them on the table. The accustomed ceremonies marked their retirement.[7]

Immediately after this interruption the question of adopting the first decree proposed upon the declaration was put to a vote. It carried by a very large majority, one hundred eighty-eight to nine, but many votes were qualified. Only sixty-four deputies voted simply yes, sixty others added restrictions to their yeas, and twenty-six others supported it indirectly by voting for the plurality, but seventeen of these made reservations, sixteen members did not vote at all, two voted an unconditional no, while seven others made explanation of their votes. The decree having been adopted, it was decided by a

[5] *Procès-verbal . . . de la noblesse*, 267.

[6] As noted previously, the minutes of the clergy name only six and one of those names is not found in the list of eight given in the *Procès-verbal* of the nobility.

[7] *Procès-verbal . . . de la noblesse*, 268.

rising vote that the president alone should present it to the king.[8]

The fact that the adoption of the decree itself was made conditional in many cases led to the submission, by a large number of deputies, of statements explanatory of their action. One hundred ten members either had given a qualified support, voted no, or refused to participate in the deliberation at all.[9] The signers of the declarations submitted to the chamber number one hundred five individuals,[10] but six of these had passed in protests on other matters prior to the vote on the decree.[11] Because of the nature of their protests, however, doubtless these six were in the same position with reference to the decree, as were the ninety-nine who made explanations after the decree was passed.

Fifty declarations in all are appended to the minutes of the session of June 25.[12] All but four were passed in on that date, and these four came in the next day.[13] Twenty-two are signed by only one noble, who, in every case, was the sole representative of his bailliage;[14] nineteen bear from two to seven signatures, each group including all the deputies of the nobility allotted to that particular district;[15] in four cases only part of the deputies

[8] *Procès-verbal . . . de la noblesse*, 269. The record of the vote follows: "94 ont été pour le oui; 68 pour le oui, avec acte; 17 pour la pluralité, avec acte; 9 pour la pluralité," a total of 188 votes for the measure. Besides there were "16 sans voix; 2 pour non; 7 pour non et acte."

[9] Computation based on figures of vote.

[10] *Procès-verbal . . . de la noblesse. Pièces annexées à la trente troisième séance*, 270–294.

[11] *Procès-verbal . . . de la noblesse*, 266. The first three declarations came in just after the reading of the letter from the nobles who joined the national assembly.

[12] *Ibid.*, 270–294.

[13] Nos. 21, 26, 27, 40 came in on June 26. No. 2 is dated June 27, but evidently through error, for the contents refer to the deliberation on the king's declaration as occurring *hier*. No. 2 simply bears the date of June, 1789, but it came in on June 26. No. 79 is undated.

[14] Ascertained by reference to Brette, *Les Constituants*. The declarations are numbers 2, 3, 4, 6, 10, 14, 16, 21, 24, 25, 26, 27, 30, 33, 34, 35, 36, 37, 41, 46, 49, 50.

[15] Nos. 1, 5, 7, 8, 9, 12, 13, 15, 19, 20, 22, 23, 28, 31, 32, 38, 39, 42, 44.

signed;[16] in one instance, two deputies, each sole representative from different districts, combined in a protest;[17] another statement was signed by six deputies from five different bailliages of Burgundy;[18] in still another, one deputy made a declaration to which several others from scattered bailliages subscribed;[19] finally one deputation passed in two separate protests, part of the members having taken no action on the decree, while the rest accepted it, but all declared themselves subject to the will of their constituents.[20]

As already indicated, three of the declarations were submitted before the decree was passed. In these cases, the deputies gave notice of their appeal to their constituents for new instructions or for the interpretation of certain articles in the mandates already confided to them.[21] The fundamental reason for the great majority of the other declarations was the fact that the king's plan, accepted by the decree of the chamber, opened the prospect of vote by head in the general assembly, proposed for the estates of 1789.[22] In two cases, there were also objections to statements in the decree itself, those touching the renunciation of pecuniary privileges and the consolidation of the public debt;[23] one of the two protested further against the articles in the first declaration of the king, concerning restrictions upon instructions, present or future, against the form of the royal session, and finally, against article XXIII of the king's second declaration which referred to the estates-general protests of ancient estates against the institution of new provincial estates.[24] But the

[16] Nos. 11, 40, 45, 48. Those signing No. 11 were alternates from the *bailliage* of Amont in Franche-Comté, and were not seated in the national assembly, according to Brette, *Les Constituants*, 129.

[17] No. 29.

[18] No. 43.

[19] No. 47.

[20] Nos. 17, 18.

[21] Nos. 1, 2, 3.

[22] Nos. 4, 6, 8, 9, 11, 15, 16, 17, 22, 23, 26, 28, 29, 31, 33, 35, 38, 39, 41, 43, 46, 49, 50. All of these state or imply that voting by head was against their instructions.

[23] Nos. 43, 45.

[24] No. 43. Art. XXIII follows: "The disputes occurring in the province where ancient estates exist and the protests that have arisen against the

chief cause for the flood of documents containing declarations, protests and explanations, was the prospect of vote by head, implied in the decree accepting the king's declaration.

On this ground, deputy after deputy qualified his vote for the decree or refrained from voting at all. Many were bound by their constituents not to consent to vote by head in any case.[25] A few were restricted, not only to vote by order, but also to the further condition that two orders had no power to bind the third.[26] A few others might vote by head—the estates being united—provided that their chamber, by separate action, consented thereto.[27] Others were under obligation to protest if ever voting by head occurred during a union of the orders.[28] Still another group was bound by their cahier to uphold vote by order constantly and as long as the most imperious necessity did not force them to abandon it. But these deputies agreed that the moment of "imperious necessity" had arrived. Hence, they fell back upon an apparently novel alternative permitted by their constituents, namely, the reduction of the three orders to two.[29] Evidently some sort of bicameral arrangement was intended, whereby the conservatives of clergy and nobility united might act as a check upon the radical third estate, even though voting were by head.

In view of the limitations upon their action, a large number could accept the decree only with the reservation that their constituents grant them a sufficient extension of power,[30] while

constitution of the assemblies ought to claim the attention of the estates general; they shall make known to his majesty the dispositions of justice and wisdom that it is suitable to adopt to establish a fixed order in the administration of these same provinces."

[25] Nos. 4, 7, 8, 9, 11, 15, 16, 22, 26, 29, 38, 43, 46.

[26] Nos. 4, 16, 49.

[27] Nos. 17.

[28] Nos. 8, 46.

[29] No. 7. Jefferson, who was the American ambassador in Paris during the period of the strife among the orders, says there was some talk that the nobility and the higher clergy might be induced to unite in one house while the third estate and lower clergy formed another. The third estate, however, was unalterably opposed to this solution of the problem. Vol. II, 456, 461, 470.

[30] Nos. 13, 14, 19, 23, 24, 25, 26, 27, 31, 33, 34, 35, 37, 38, 39, 41, 44, 45, 48, 50.

others announced that they must abstain from any part in the deliberation until they had permission from their constituents.[31] Some simply gave notice of their remaining in the minority without evidence of any intention on their part to appeal to their electors.[32] Several who did appeal, added that they must refrain from participation in any deliberation where vote would be by head[33] and some expressly reserved all rights while awaiting new instructions.[34] Various deputies gave their adhesion to the decree in so far as it was not contrary to their mandates,[35] or with the reservation of conforming to article V of the king's declaration which offered them release from imperative instructions.[36] Still other representatives simply accepted the will of the majority, although not voting for the decree themselves.[37] Others stated that they accepted the decision of the plurality of their order, in harmony with their mandates, or subject to the sanction of their constituents.[38]

In order to ascertain the will of those who had elected them, various deputies proclaimed their intention of taking steps to have the nobility of their districts convoked again by the king, that the mandates which they had received might be modified or confirmed.[39] One group, however, protested against such convocation of the nobility and also against the king's prohibition of imperative instructions, as infringements upon the freedom of the nobility.[40] In some instances, it was proposed to have the re-convened nobility consider the king's declarations as the step preliminary to the modification of limiting instructions.[41] Some explicitly bound themselves to abide by whatever changes might be made,[42] but many of the deputies must

[31] Nos. 8, 9, 10, 11, 12, 18, 40, 46.
[32] No. 40.
[33] Nos. 4, 15, 16, 17, 20, 23, 26, 47, 49, 50.
[34] No. 44.
[35] Nos. 4, 5, 13, 16, 42, 43, 47, 49.
[36] Nos. 17, 34, 41, 42.
[37] Nos. 28, 29.
[38] Nos. 21, 22, 30, 32, 36.
[39] Nos. 3, 8, 11, 12, 13, 41, 42, 46.
[40] No. 45.
[41] Nos. 4, 42, 47, 49.
[42] Nos. 16, 41, 42, 44.

have felt that their constituents would support their action in voting for the decree.

More than half of the fifty protests laid on the table, contained the specific request that official record be made of their action, evidently in order to justify themselves to their constituents.[43] A few who did not either protest or explain, but simply stated how they had voted, made the same request, apparently for the reason just indicated.[44]

The analysis of these declarations shows that, at bottom, the question of the definite acceptance of the first declaration of the king rested upon a referendum decision by the various constituencies of the nobility. The decree had only a small plurality of unqualified votes. Others supported it temporarily, out of deference for the king,[45] or because forced by "imperious circumstances,"[46] because conscience so advised,[47] or to secure the boon of peace and the safety of the state.[48] Whether they might continue to create a majority in its favor depended upon the attitude of the nobles whom they represented.

Doubtless the king had not expected so much opposition by the nobility to his project for effecting the temporary union of the estates. That they had raised such objection to acquiescence in the denatured plan for the union of the orders, sponsored by the king, shows how divergent from the revolutionary scheme of union, fostered by the third estate, was the nobility's conception of the organization of the estates-general. Their attitude indicates further how urgent the circumstances would have to be, that could impel the nobility, as a whole, to a partial or even an apparent support of the policy of the despised national assembly.

[43] Nos. 9, 10, 21, 40, 49. All state that they made declarations for the purpose of justifying themselves at home.

[44] Nos. 6, 9, 10, 40, 36.

[45] Nos. 4, 13, 14, 43, 44, 45, 47.

[46] Nos. 27, 33, 35, 38, 39.

[47] No. 6.

[48] Nos. 14, 43, 45, 48.

X

The circumstances, however, which were to result in an apparent yielding of the nobility as well as of the minority of the clergy, to the policy of the third estate became more evident every day, as did also the absolute failure of the king's intervention on June 23. The editor of the *Assemblée nationale* clearly summed up the situation disclosed by a general survey of conditions on June 26.

"It is only today," he declared, "that the inconsistency and baneful result of the royal session are felt. They wished to divide the orders, but the violent means they have used to effect this division, have produced a wholly contrary effect. They wished to calm the public mind, to seduce it, but they have only irritated and aroused it. They desired to paralyze the authority that the national assembly should have, but the assembly has acquired more force and more vigor. To restrain the people, they conceived the necessity of surrounding them with arms and foreign troops, but this unrighteous manoeuvre has served merely to cause murmurs, confined up to that time, to reveal a fire which in an instant can set all France aflame."[1] It is apparent that the government was treading on dangerous ground and that the assembly had less cause for apprehension on June 26 than at any time, perhaps, since the royal session.

As on the day before, so on this day, the strength of the assembly was increased in numbers, if in no other sense, by seven more of the clergy who were drawn to the majority of their order. It is significant that three of these represented the high clergy, for two bishops and that object of popular hatred and indignation—the Archbishop of Paris—came with a group of *curés*.[2] On the opening of the session, the bishops of Orange

[1] *Assemblée nationale*, I, 231.

[2] Duquesnoy (I, 133–134) names only the two bishops and the Archbishop of Paris; *Point du jour* (I, 53, 54, 59) mentions the three high clergy and says (54): "Il y a des curés qui se présentent;" Biauzat (II, 141) names merely the Bishop of Orange and the archbishop; *Courrier de Provence* (Lettre XIV, 1) speaks of the three high clergy and also "quelques curés;" *Assemblée nationale* (I, 233, 234) notes only the three high clergy; *Procès-verbal* (No. 8, 1, 2, 16), however, names seven; Jallet (104) gives four. Boullé (*Docs. inédits*, *Revue*

and Autun appeared,[3] forced to this action, one member suspected, by the attitude of public opinion.[4] At any rate, they submitted their credentials for common verification. Following them came four *curés*, who are said to have been introduced by the Archbishop of Vienne.[5] Two of them, Saint-Albin and Dolomieu, were deputies from Dauphiné, who had protested in the chamber of the clergy June 24, against the formal organization of the order,[6] circumstances that account, perhaps, for the archbishop's interest in them. The third, Goubert, represented the *sénéchaussée* of Gueret (Haute-marche); the last, La Porterie, who acted as spokesman for the party, was a deputy from the *sénéchaussée* of Mont de Marsan. The latter stated very briefly that they had come to join the majority of their order and to submit their credentials to the assembly.[7]

The arrival of the Archbishop of Paris, later in the day, produced a great sensation.[8] The rank and file of the clergy

de la rév., XIII, 77), mentions only the two bishops and the Archbishop of Paris.

[3] *Procès-verbal*, No. 8, 1; *Courrier de Provence, Lettre XIV*, 1; *Point du jour*, I, 53; Biauzat, II, 141; *Assemblée nationale*, I, 233; Duquesnoy, I, 133. The last says they came after the committee of verification had reported, but he does not follow the order of events closely.

[4] *Point du jour*, I, 53.

[5] *Ibid.*; *Courrier de Provence, Lettre XIV*, 1; *Procès-verbal*, No. 8, 2. These came, or were introduced after the session was under way.

[6] Barmond, *Récit*, 269–270.

[7] *Procès-verbal*, No. 8, 2.

[8] Just when the archbishop entered the assembly is not clear, but it is evident that the session was well under way. The *Procès-verbal* (No. 8, 16) reports his arrival after the reception of the electoral deputation from Paris, and after the report of the committee of verification, but before the deputations from the nobility and the Paris commune. The *Point du jour* (I, 59) gives his entrance following the third deputation, that from the Paris commune. The *Assemblée nationale* (I, 243) places his advent immediately after the second delegation, that from the nobility. Duquesnoy (I, 134) reports his arrival after the deputation of the Paris commune, but before that from the nobility. Both the *Courrier de Provence* (*Lettre XIV*, 1) and Biauzat (II, 141) name the clergy together, but evidently these do not attempt in general to follow the order of events. Boullé (*Docs. inédits*, *Revue de la rév.*, XIII, 77) places the archbishop's arrival just after the deputation from the majority of the nobility and before that of the Paris commune.

was always welcome, but the turning of the leaders to the assembly was of vastly greater consequence. That one *curé* came meant so much increase in numbers, but that another archbishop came, and that one the Archbishop of Paris, meant casting the weight of his influence on the side of the assembly. The *Point du jour* states that he was conducted into the hall by the Archbishop of Bordeaux[9] and as the two took their seats with the clergy the liveliest shouts and applause went up.[10] Much affected by these testimonials of joy, the archbishop rose to explain his action. "Gentlemen," he began, "the love of peace has brought me today into the midst of this august assembly; accept, gentlemen, the sincere expression of my complete devotion to the country, to the service of the king, and to the welfare of the people. I shall deem myself more than fortunate, if I am able to contribute to these objects even at the cost of my life. May I be able to co-operate in the conciliation which is so necessary, and which I have always had in view. I will be more happy if the step that I have taken at this moment can contribute to this conciliation, which will always be the object of my prayers.[11] We may well imagine that his "love of peace" had a very specific application in his mind. The taunts and indignities of the crowds in the streets to which he had been a constant victim were enough to drive him to seek a refuge in the assembly, lest he be assassinated.[12] Duquesnoy reports a

[9] *Point du jour*, I, 59.

[10] *Ibid.*; Duquesnoy, I, 134; *Assemblée nationale*, I, 214.

[11] Boullé, *Documents inédits, Revue de la rév.*, XIII, 77; *Procès-verbal*, No. 8, 16; *Point du jour*, I, 59; *Assemblée nationale*, I, 243. The latter says: "Il exposa en fort peu de mots, qu'il y avait longtemps qu'il se serait rendu dans cette salle si un pouvoir impérieux, n'eut enchaîne sa conscience et qu'il espérait de la part de ses commettans des pouvoirs moins rigoreux." The speeches in the first two do not indicate that he said anything about credentials. The text from the *Procès-verbal* is followed in the narrative.

[12] Duquesnoy, I, 128, 132; Biauzat, II, 138; Young, 122; *Assemblée nationale*, I, 219; Jallet, 102; *Bulletin d'un agent secret*, No. 47 (*La révolution française*, XXIV, 71). Bailly (I, 232) gives the following as the cause of popular hostility toward the Archbishop of Paris: "Je crois que la députation, vraie ou fausse, faite par le clergé secrètement et dans la nuit du 17 ou 18 au roi, à Marly, y contribua beaucoup. . . . On disait que M. l'archevêque de Paris était à la tête, qu'il avait porté le crucifix, et qu'il s'était jeté aux genoux

rumor that six merchant guilds of Paris had written to him that they were running the greatest risks, that his palace would be burnt, and that trade would be ruined.[13] Whatever the motives that brought him might be, the assembly gladly welcomed him. Bailly replied to his speech, stating, in part, that they had long had their attention fixed on him—doubtless very true as well as polite,—and that the proof of patriotism given in his act of that day was the final crown to all his virtues.[14]

The clergy were coming over rather rapidly, but the thinning in the ranks of the nobles was slow. Only one, the Count of Crécy, came June 26. He explained that he had been kept away against his personal inclinations because his instructions were for vote by order, unless the majority of the estates decided otherwise. The number then embraced in the assembly justified him, however, in consenting to vote by head, so he had gladly yielded to the dictates of his conscience and to the order of his constituents.[15] He had stated clearly his acceptance of the principles of the assembly.

du roi; c'est ainsi qu'on excite le peuple." Jallet (103), after speaking of the disturbances on the evening of June 24, says: "L'archevêque de Paris envoya ses pouvoirs, le soir même, à la commission de la vérification, en annoncant qu'il y était forcé par la multitude. Sur cette declaration, on lui renvoya ses pouvoirs, et on lui fit dire que cette démarche, pour être légale, devait être parfaitement libre." This is corroborated by the *Correspondance d'un député . . . avec la Marquise de Crequy, Documents inédits, Revue de la rév.*, II, 37, where an account similar to that of Bailly is found. Evidently the visit to Marly occurred the night of June 19–20, instead of June 17–18 as given by Bailly.

[13] Duquesnoy, I, 137.

[14] *Point du jour*, I, 59; *Procès-verbal*, No. 8, 16; Biauzat, II, 142; Duquesnoy, I, 134; *Assemblée nationale*, I, 243; *Courrier de Provence, Lettre XIV*, 2. Mirabeau praises Bailly very highly for this response: "M. le président, qui trouve toujours tant d'esprit dans l'âme pour servir d'auxiliaire à son superbe talent, dit en deux mots au prélat attendri, ce que la circonstance pouvait offrir de plus convenable et de plus flatteur." The reply was carried to Paris, as noted in the *Bulletin d'un agent secret*, No. 47. (*La révolution française*, XXIV, 73.)

[15] *Procès-verbal*, No. 8, 1; *Point du jour*, I, 53; *Courrier de Provence, Lettre XIV*, 1; Duquesnoy, I, 133; *Assemblée nationale*, I, 234; Biauzat, II, 141. The last named says: "M. de Crécy et deux autres nobles se sont joints à nous." Perhaps he mistook some of the clergy for nobles.

But, important as these daily additions were in increasing the internal stability of the assembly, of vastly greater significance was the definitive declaration of the city of Paris in favor of the policy of the third estate. First, through a deputation from the electoral assembly of the third estate in the capital and then by a delegation from the citizens of Paris, the deputies were convincingly assured that the public opinion of which they had so much need was firm in their support. What Paris had done would have an influence in determining other cities to do likewise.

The electoral deputies appeared early in the session, bearing their tribute of recognition. But before speaking of their reception, let us notice how the body which they represented happened to be in existence still and what had led to this action of June 26. On May 10, the assembly of electors, representing the third estate of Paris inside the walls, voted to continue its meetings during the session of the estates-general in order to correspond with its deputies.[16] This decree in itself was a revolutionary act and it was executed in direct opposition to the decision of the government. Bailly, who had been the secretary of the electoral assembly until May 23, gives some details of the attempt to secure governmental sanction of its decision to meet. The decree had resulted in further discussion after the appointed work of the assembly was completed, without resuming the sessions, at least regularly, since there was no *procès-verbal*. Although it persisted in its decision, Bailly was commissioned to talk to the ministry in regard to the matter.[17] His appeal to Villedeuil resulted in the decision that the work of the electors being finished, there would be no occasion for their further meeting.

This seemed conclusive, but the matter was urged, and Villedeuil consented to submit the question to the commission appointed by the king to deal with matters relative to the

[16] *Procès-verbal des électeurs de Paris*, I, 39; Bailly (I, 235) gives the same, but he had the *Procès-verbal* before him.

[17] Just when Bailly made his appeal to the ministry cannot be determined. Perhaps it was after May 22, when he resigned his secretaryship in order to go to the assembly at Versailles. The ministers and commission would have been easily accessible then.

primary assemblies. The commission, however, confirmed the reply of the minister, but, nevertheless, the obstinate electors had not submitted.[18] May 23, a committee had been appointed to secure a fit place for the continuation of the sessions.[19] Finally, came the royal session which led directly to the action of June 26. The circumstances of that meeting caused the electors of the third estate of Paris to gather on June 25, in the *Salle du Musée*, rue Dauphiné. A few nobles desired to join them and were admitted. This assemblage, after having heard the report of the committee appointed May 23, then voted to send a deputation to ask again for a room in the Hôtel-de-Ville, as the committee had already made some advances in this direction. Besides this, they voted to send a deputation with an address to the national assembly.[20]

[18] Bailly, I, 235–236. No mention of this negotiation is made in the *Procès-verbal* of the electoral assembly.

[19] *Procès-verbal des électeurs de Paris*, I, 87. "Il a été arrêté que l'assemblée serait convoquée par bulletin envoyé à chaque électeur, pour le mercredi 7 juin prochain, dans le lieu qui serait choisi." The record contains no account of a meeting on June 7, which would not have been "mercredi" anyway.

[20] *Correspondance d'un député de la noblesse . . . avec la Marquise de Crequy, Documents inédits, Revue de la rév.*, II, 36; Young, 180; *Procès-verbal des électeurs de Paris*, I, 88–93. Bailly (I, 234–236) confirms this. In *Bulletins d'un agent secret*, No. 51, dated June 29, 1789 (in *La révolution française*, XXIV, 77), is given a similar account. In his *Bulletin*, No. 46 (*La rév. franç.*, XXIII, 546), the same writer says there was talk, June 24, at the Palais Royal, of a meeting of the electors at the *Salle du Musée, rue Dauphiné* to invite the national assembly to come to Paris. He did not believe that the meeting would take place. In No. 51, he announced that the electors had met there both June 25 and 26, but that the hall was too small, so they adjourned to the city hall to hold their sessions. He says they proposed to establish a *bourgeoisie* militia to guard the city. Young spoke (181) of the electors' meeting: "In the assembly of electors . . . for sending a deputation to the National Assembly, the language that was talked . . . was nothing less than a revolution in the government, and the establishment of a free constitution: what they mean by a free constitution is easily understood—*a republic*."

The writer of the *Correspondance d'un député de la noblesse . . . avec la marquise de Crequy*, says of the meeting, on June 25: "Hier, il a fait assembler le Tiers État ou ses créatures du Tiers État de Paris. Le projet est de retirer les pouvoirs de MM. Treilhard, Malouët, et autres, que l'on regard comme traîtres à la patrie, parce qu'ils osent avoir un avis modéré et le dire."

The delegation arrived in Versailles about nine o'clock in the morning of June 26 and at once one of the members was sent to apprise Bailly of their arrival and of the purpose of their coming.[21] When Bailly announced to the assembly that this deputation asked permission to enter great applause was heard and the consent of the assembly seemed to have been granted without question.[22] At exactly ten o'clock—Moreau de Saint-Méry stated—they made their way through the troops about the hall up to the vestibule where a member of the national assembly came immediately to introduce them.[23] Their entrance was the signal for the most enthusiastic applause from the whole assembly.[24] Moreau de Saint-Méry, as spokesman for the party, made a short speech of explanation.[25] "We were sent by the electoral assembly of Paris," he said, "to carry the just tribute of affection and gratitude from the inhabitants of the capital. Although we cannot express to you the feelings awakened in French hearts, still we dare to assure you that they are the same as you yourselves have voiced. The electoral assembly congratulates itself on being the first to render this homage to the virtue and courage of the assembly, where the most eminent ranks shine with a new brilliance by reason of their union and the assumption of that finest and the first of all titles—citizen."[26]

[21] *Ibid.*, I, 100. From the report made to the electoral assembly by Moreau de Saint-Méry.

[22] *Assemblée nationale*, I, 234.

[23] *Procès-verbal des électeurs de Paris*, I, 100–101.

[24] *Procès-verbal*, No. 8, 3; *Point du jour*, I, 53; Duquesnoy, I, 133; *Assemblée nationale*, I, 234; Biauzat, II, 142; *Courrier de Provence, Lettre XIV*, 2; *Procès-verbal des électeurs de Paris*, I, 101; Jallet, 104.

[25] *Point du jour* (I, 53) says Moreau was known by an excellent work on the colonies; *Bulletins d'un agent secret*, No. 48 (*La révolution française*, XXIV, 73), says of this man: " Moreau de Saint-Méry, conseiller au conseil superieur de St.-Dominque, a porté la parole." Brette, the editor of these manuscripts, adds in a footnote: " Mederic-Louis-Elie Moreau de Saint-Méry, fut admis en octobre 1789 à l'assemblee nationale comme député de la Martinique;" *Procès-verbal*, No. 8, 3: Duquesnoy, I, 133; *Procès-verbal des électeurs de Paris*, I, 101; *Etats-généraux, Extrait du Journal de Paris*, I, 113; *Histoire de la rév.*, 232–233; Boullé, in *Documents inédits, Revue de la rév.*, XIII, 77–79.

[26] *Procès-verbal*, No. 8, 3; *Point du jour*, I, 53–54; Boullé, *Docs. inédits, Revue de la rév.*, XIII, 78–79; *Etats-généraux, Extrait du journal de Paris*, I, 113.

Without further preliminaries, Moreau read an extract from the minutes of the electoral assembly of June 25, showing that an address was voted that was to contain the electors' sentiments, particularly, the statement of their adhesion to the decrees of the national assembly, and first of all, to those of June 17. Then the minutes showed that four men were selected to frame the address in harmony with the assembly's outline.[27] "The assembly of the electors of the city of Paris," it ran, "filled with respect and gratitude for the wise, firm and patriotic conduct of the national assembly, takes advantage of the first moment of its union after vain attempts to get together, to give expression to its sentiments and to declare its unalterable adhesion to the deliberations of the national assembly, particularly those of June 17. It will sustain those principles at all times and under all circumstances. It will consecrate forever in memory the names of the nobles and clergy who have joined the national assembly."[28] Finally, the extract noted that twenty delegates, including the four who had drafted the address, were named to carry it to the assembly in Versailles.[29] This reading called forth as much applause as had the appearance of the delegation itself,—so Moreau reported to the electoral assembly.[30]

In his most felicitous manner, Bailly thanked the electors for this testimonial of hearty support and he commissioned the delegates to report to the body that had sent them, that a partial union of the orders was already effected and that a complete union was hoped for soon.[31] Then, as a mark of its favor, and perhaps for reasons of its own, the national assembly

[27] *Procès-verbal des électeurs de Paris*, I, 93; *Procès-verbal*, No. , 4–5; Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 78; *Mercure de France: Journal Politique de Bruxelles*, No. 27, 47.

[28] *Procès-verbal des électeurs de Paris*, I, 93; *Procès-verbal*, No. 8, 4–5; *Assemblée nationale*, I, 235. With some changes in paragraphing and a few in wording the text of the address is given here. *Point du jour*, I, 54.

[29] *Procès-verbal des électeurs de Paris*, I, 94; *Procès-verbal*, No. 8, 5–6; Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 78.

[30] *Procès-verbal des électeurs de Paris*, I, 101.

[31] *Procès-verbal*, No. 8, 6. The full text is given. *Assemblée nationale* (I, 235) has a condensation of what Bailly said; *Point du jour*, I, 54; Jallet (104), Biauzat (II, 142) and Duquesnoy (I, 133) mention that Bailly replied.

unanimously agreed to the proposition that the deputation be invited to remain throughout the session[32] and it is stated that they were seated opposite the president's desk, between the clergy and nobles.[33] Through this means, the actual workings of the assembly would be carried to the public in spite of the king's prohibition of spectators and with a directness and force that no printing of the records could effect. This invitation might be a revolutionary act in the eyes of the government, but necessity justified the third estate in extending it to the representatives of the electoral assembly.

This deputation had, after all, some pretense to legality, but the delegation from the citizens of Paris that came later in the day had not even a suspicion of legality about it. Under ordinary circumstances, doubtless, it would not have been admitted, but the necessity of having the public sentiment of Paris on its side was too urgent for the assembly to pass such an opportunity to secure it.[34] As the idea of such an undertaking had originated in the Palais Royal, at the *Cafés du Foy* and *Caveau*,[35] so back to

[32] *Procès-verbal des électeurs de Paris*, I, 101; *Procès-verbal*, No. 8, 6; *Point du jour*, I, 54; *Assemblée nationale*, I, 235; *Courrier de Provence*, *Lettre XIV*, 2; Jallet, 105.

[33] *Assemblée nationale*, I, 235.

[34] Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 77; *Etats-généraux*, *Extrait du journal de Paris*, I, 116. Both say this was the third deputation. *Procès-verbal* (No. 8, 20) and the *Point du jour* (I, 58) agree that this deputation was the third one that came, as does also the *Assemblée nationale* (I, 214). Biauzat (II, 145) makes but mere mention of it in a postscript. In the *Procès-verbal des électeurs de Paris* (I, 101, 102), Moreau de Saint-Méry reported on his deputation's being seated and added: "Un moment après, on a annoncé et proposé d'introduire une autre députation de Paris, envoyée non par aucune corporation," and Jallet (104) gives practically the same thing: "Quelque moments après, une députation qui s'annoncait des citoyens de Paris . . . se presente." Duquesnoy (I, 133–44) has it precede the deputation from the nobles and the entrance of the Archbishop of Paris. *Courrier de Provence* (*Lettre XIV*, 2) also treats this in connection with the electoral deputation before the nobles. So also does the *Mercure de France: Journal Politique de Bruxelles*, No. 27, 46.

[35] Duquesnoy, I, 133; *Bulletins d'un agent secret*, No. 48, under date of June 26 (*La révolution française*, XXIV, 73). The writer of this account, who was in Paris, says: "La seconde était une députation directe du Palais Royal, marquée sous la dénomination des trois ordres." Jallet, 104; *Procès-*

these gathering places of enthusiastic and democratic spirits would be carried the accounts of the reception given by the assembly. From these centers, the reports of what had been done in the hall at Versailles would be spread over the capital. Yet, in face of these considerations, the assembly showed some hesitancy in admitting the delegation. Bailly thought it best to permit it to enter, however, and it was given a hearty welcome.[36]

Eight men composed the party which bore an address to the assembly. It bore a large number of signatures, among them names of lawyers, merchants, and even a few nobles.[37] M. Mailly presented the address, which was marked throughout by an enthusiastic tenor.[38] Offering, in the first place, a sort of apologetic explanation for the coming of the delegation, the address declared that the citizens of the commune of Paris were cognizant of the fact that their views were legitimately and sufficiently expressed through the assembly of electors. Still, a great many had thought that, in the ardor of the zeal which animated them, it would be permissible to express in a more direct way their approval which they could no longer defer when they knew with "what dignity, what activity, and what firmness" the assembly had fulfilled the glorious and difficult functions entrusted to it. "The quiet, the security, and the happiness we enjoy after days of trouble, alarm and chagrin are the work of your common zeal, intensified by circumstances, and that of the other members united today," was the tribute paid to the labors of the assembly. The address then begged Bailly to interpret the sentiments of the citizens of Paris to their own representatives "whose sublime spirit has so

verbal des électeurs de Paris, I, 102. Here is found "Une autre députation de Paris, envoyée . . . par une sociète de citoyens librement réunis."

[36] *Procès-verbal*, No. 8, 20; *Point du jour*, I, 58; Duquesnoy, I, 134; Jallet, 104–105; *Assemblée nationale*, I, 244; *Procès-verbal des électeurs de Paris*, I, 102; Bailly, I, 242.

[37] *Procès-verbal* (No. 8, 20) gives the names of the eight delegates and Duquesnoy (I, 134) says there were eight in the party. The *Procès-verbal* (No. 8, 23–24) gives the list of signers. In the *Courrier de Provence* (*Lettre XIV*, 2) Mirabeau makes a sweeping statement: "Une addresse chargée de dix mille signatures."

[38] *Procès-verbal*, No. 8, 20; Duquesnoy, I, 134.

courageously manifested itself; to the illustrious and respectable members of the clergy . . . who by their union with the national assembly, acquired a new claim to the homage of the present generation and to that of posterity; finally, to those noble citizens who were inclined to sink individual interest in the general welfare and to seek their happiness only in the happiness of all." Particular emphasis was laid upon the satisfaction it gave the people to see the "first prince of the blood" in the ranks of the assembly. The address closed with a statement of the inability to depict in strong enough terms "the love of all the citizens for their king, their devotion to their country, and their confidence in their representatives."[39]

Bailly made a very judicious response to the address. He thanked the citizens of Paris for their interest, although it had not been conveyed through regular channels, but yet gave no undue attention to their act. He emphasized the fact of the unity of the assembly where the Paris delegates saw their worthy archbishop sitting. He urged them to inform the capital of the zeal of the assembly for the public welfare and to ask all the inhabitants of the city to do everything possible to quiet any popular agitation and to represent peace as the first condition requisite to the assembly's labors for the regeneration of France.[40] The deputation from the electors and that from the commune showed conclusively that the assembly had the public support of Paris, yet Bailly's words clearly indicate that the deputies did not desire, and might even fear, any immoderate expression of popular sentiment.

If the admission of those two deputations had caused the

[39] *Procès-verbal*, No. 8, 20–23. The full text of the address is given here. The *Assemblée nationale* (I, 244–46) also prints the address, with a few slight variations or omissions in wording as compared with the form in the *Procès-verbal*. Jallet (104, 105) says of the address: "Ils lurent, avant que d'entrer, leur discours à deux députés des communes, qui leur firent retrancher quelques paragraphes un peu trop forts."

[40] *Procès-verbal*, No. 8, 24–25; *Assemblée nationale*, I, 246–47. The text is found in the second also. The *Point du jour* (I, 58) gives a reproduction of the last part of Bailly's response; Duquesnoy (I, 134) and *Procès-verbal des électeurs de Paris* (I, 102) say that Bailly made a response, as does also Jallet (105); Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 77; and *Etats-généraux*, *Journal de Paris*, I, 116.

assembly to act with hesitation, the news of the coming of a deputation from the majority of the nobility, previous to the appearance of the delegation of the Paris commune, not only led to much greater hesitation, but produced marked excitement. The admission of the deputations from the capital was, at bottom, a question of expediency; the reception of that from the order of the nobility had to do with the principles upon which the national assembly was based. A heated debate was on when Bailly announced that the nobles were coming.[41] Everything was put aside to meet this new exigency which gave rise to a lengthy discussion, marked by a lively tilt between Fréteau for the nobles, and Mirabeau for the third estate. Some, it seems, did not wish to receive them under any condition and Bailly's opinion was that the manner in which the assembly was organized prevented any effective reception.[42] Fréteau, however, while recognizing the integrity and indivisibility of the national assembly, held that the delegation should be admitted as a means of effecting the desired union of all the orders. The nobles were to be received, however, not as deputies of the chamber of the nobility, but as deputies of the *bailliages*, of which they were representatives. This capacity belonged to them, he held, because, even if a truly legal judgment of their credentials had not yet been pronounced, the deputies of the nobility, who were already united, could attest, at least, to the truth of a friendly and a provisional verification.[43]

The Archbishop of Vienne and Garat seemingly supported the view that they should be admitted, but not in such a manner as to recognize the order of the nobility.[44]

[41] *Point du jour*, I, 57; *Assemblée nationale*, I, 239.

[42] *Assemblée nationale*, I, 239–40; Boullé (*Docs. inédits, Revue de la rév.*, XIII, 77) merely refers to the debate, but gives no particulars. *Etats-généraux, Extrait du journal de Paris*, I, 114.

[43] *Point du jour*, I, 57; *Assemblée nationale*, I, 240; *Courrier de Provence, Lettre XIV*, 3. The second source represents Fréteau as having spoken twice, once at the opening of the debate, and again after Mirabeau; the first gives but one speech, which seems to be a combination of the two in the *Assemblée nationale*. The *Courrier de Provence* does not give Freteau's name, but says: "Un député réuni," and gives the import of his speech.

[44] *Assemblée nationale*, I, 240.

At this point, it appears that Mirabeau interposed to criticize the ideas and to reflect upon the motives of Fréteau in advancing such views. Fraternity, he grimly remarked, was the duty of all men, but principles alone could save rights and form the basis of justice and even of prudence. Consequently, he held that the nobles could not be received as noble deputies of the *bailliages*. He used, apparently, the following line of argument. The nobles then in the national assembly recognized in the fact that they had come to submit their credentials, that these could be passed upon only in common. The verification in the chamber of the nobles was illegal and no one could participate in such. Furthermore, if this were not so, the nobles already united could not sanction as witnesses that which they had done as judges when they had no right to do so. Hence, those coming could never be received as deputies in any sense, but merely as nobles.[45] At this reflection upon the motives and logic of Fréteau—an attack which Biauzat states brought forth murmurs and the cry of "Order!" from the assembly[46]—Fréteau himself indignantly rose to reply. He sought to explain his sentiments and he declared that, if he had been slow in uniting with the assembly, he had not been kept away by his mode of thinking. His opinion, he maintained, was stronger perhaps than that manifested in the decree of June 17. Instead of constituting themselves national assembly, he held that the commons had the right to constitute themselves the states-general, thus showing less regard for the feelings of the other orders. This self-justification is said to have elicited the most sincere appreciation from the assembly, but he continued to talk on in extenuation of his views. He held that they could not refuse to receive the deputies as noble deputies of the *bailliages* and finally that they could no more close the doors to them than they had done to the city of Paris.[47]

[45] *Courrier de Provence, Lettre XIV*, 3. Mirabeau uses his favorite mode of reference to himself, "Un député des communes," in giving the points of his argument. The *Point du jour* (I, 57) gives a brief account of Mirabeau's remarks; *Assemblée nationale*, I, 240–41; Biauzat, II, 142.

[46] Biauzat, II, 142.

[47] *Assemblée nationale*, I, 241–42; *Point du jour*, I, 57. The certainty of the arguments used in this debate is hard to establish. Each witness seems to

While the discussion was going on it appears that the nobles already in the assembly agreed to a fraternal reception of those not united, following Target's suggestion that it was fitting to send out four nobles to conduct their brothers in.[48] At the same time, he is reported to have warned the assembly to prepare itself for the words "third estate," which would surely be used.[49] Finally, the assembly did vote to receive the deputation, but under conditions proposed by Bailly.[50]

The delegation came and took seats with the nobles. Two dukes, three counts and a marquis composed it.[51] The Duc de Liancourt acted as spokesman. He stated briefly that the nobility had commissioned them to communicate a decree passed in the chamber of the nobility. Apropos of this, he emphasized the fact that the sanction given to the first declaration of the king showed their desire for conciliation, and their sincere hope that all the orders might be brought into concord without which it was impossible to secure the welfare of the state, the first duty

have seized a different point, thus, oftentimes, making the accounts supplementary.

[48] *Point du jour*, I, 57; *Assemblée nationale*, I, 242; *Procès-verbal . . . de la noblesse*, 297. The first has: "Au milieu de cette discussion, les députés nobles réunis ont voté, par un mouvement fraternal, au devant de ceux de la noblesse non réunis." The second gives: "M. Target représenta qu'il convenait à l'assemblée que quatre de MM. de la noblesse, par un mouvement de confraternité, allassent au-devant de la députation et les amenassent dans l'assemblée, comme des frères qui conduisent leurs autres frères." The *Procès-verbal* of the nobility gives the report of the leader, the Duc de Liancourt, after the return of the deputation: "Qu'un assez grand nombre de députés de cette chamber, parmi lesquels il y en avoit plusieurs de ceux de l'Ordre de la Noblesse qui y avaient passé la veille étaient venus la reçevoir, mais sans proportion determinée."

[49] *Assemblée nationale*, I, 242.

[50] *Ibid.*; *Etats-généraux*, *Extrait du journal de Paris*, I, 114; Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 77; *Procès-verbal*, No. 8, 17; Biauzat, II, 142.

[51] *Procès-verbal*, No. 8, 17; *Procès-verbal . . . de la noblesse*, 296. Comte de Motboissier, Comte de Laipaud, Comte de Rennel, Duc de Biron, Duc de Liancourt and Clermont-Mont-Saint-Jean, Marquis de La Bathie. The list of names has been verified by comparison with the list in Brette, *Les Constituants*, 198–273.

of every good citizen.[52] Then a long extract from the minutes of the nobility, containing the text of the decree passed the day before, was read. As previously noted, it declared for an unconditional acceptance of the propositions embraced in the first declaration of the king, given in the royal session of June 23. Under such circumstances, there could be no recognition of the order of the nobility by the assembly; the conflict of principles was irreconcilable.

Bailly calmly made the reply agreed upon before the admission of the nobles as the condition of their reception. In conformity with the policy of the assembly, he stated that it could recognize them only as noble deputies not united, as their fellow citizens and brothers. The assembly wished to place before the nobles the efforts constantly being made to effect their union in the general hall.[53] Such a repulse to all that the nobles had done was followed by so marked a silence, the *Point du jour* records, that it seemed as if the use of applause had been entirely lost.[54] Without another word, the nobles withdrew having been conducted outside in the same manner as they had been received.[55] The assembly had dared to vindicate its principles not less firmly by this act than when it declared its persistence in all that had been done before the royal session. Once for all, the nobles

[52] *Procès-verbal*, No. 8, p. 17. The speech of the duke is given in full. The *Courrier de Provence*, *Lettre XIV*, 4; *Assemblée nationale*, I, 242; *Point du jour*, I, 57; Duquesnoy, I, 134; all these mention the speech. *Procès-verbal . . . de la noblesse*, 296. This gives the text as agreed upon in the chamber before the deputation went to the national assembly. The texts are the same except for one word. The *Procès-verbal* of the national assembly has the clause, "pour que les Ordres soient ramenés à la concord." The *Procès-verbal* of the nobility inserts *tous* before *les Ordres*.

[53] *Procès-verbal*, No. 8, 20; *Assemblée nationale* (I, 243) also gives the text of Bailly's reply; the *Point du jour* (I, 57–58) gives a resume of the reply; *Courrier de Provence*, *Lettre XIV*, 4; Duquesnoy, I, 134. The last gives the speech and criticizes it as "très déplacée, sèche, et propre à éloigner peut-être pour jamais la réunion que nous devons tant désirer." *Bulletin d'un agent secret*, No. 48 (*La révolution française*, XXIV, 74), gives the gist of the reply, but does not name Bailly. Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 77; *Etats-généraux*, *Extrait du journal de Paris*, I, 114–115.

[54] *Point du jour*, I, 58.

[55] *Procès-verbal*, No. 8, 20.

had learned that the national assembly would not compromise itself by any recognition of another legislative body.

But before all these matters had come before the assembly, the committee of verification had begun its report, apparently just after the deputation of electors had been received.[56] This day the contest in the Dauphiné delegation and the declaration of Lally-Tolendal, found with his credentials, seemed to vary somewhat the monotony of the uninteresting but necessary report. Bouchotte began by presenting the papers of seventeen clergy and nobles which were correct and which the assembly ratified. Two others of the clergy, Blandin from Orléans and Delettre from Soissons, brought only the record of their oath of office in which their election was announced. The assembly gave them the customary two weeks in which to secure the proper papers; meantime they had a provisional seat. The deputies of the commons from Douai and Orchiex, who had made a similar blunder earlier, had presented their real credentials to the committee, so they were voted a permanent seat.[57]

Thibault, another member of the committee, notified the assembly that the credentials of M. de Coulmiers, the Abbé d'Abbecourt, deputy from the Prévôté of Paris, were in correct form and he was recognized as a lawful deputy.[58] M. Bluget announced that the credentials of another group of seven clergy and nobles were regular. They also were pronounced deputies by the assembly.[59]

But previous to this, the ordinary course of business had been interrupted when Bouchotte laid before the assembly a declaration he had found among the credentials. It emanated from Lally-Tolendal and explained his situation. Consequently, his

[56] *Procès-verbal*, No. 8, 6–15; *Point du jour*, I, 55; Duquesnoy, I, 133; *Assemblée nationale*, I, 236, *Courrier de Provence*, *Lettre XIV*, 2–3. The first two indicate that the report began after the electoral deputation had been received and the *Assemblée nationale* gives the same order. Duquesnoy mentions it first, but he does not strictly adhere to the actual order of occurrence. The report may have begun early and then have been discontinued as other matters engaged the attention of the assembly from time to time.

[57] *Procès-verbal*, No. 8, 6–7, 11–12.

[58] *Procès-verbal*, No. 8, 12.

[59] *Procès-verbal*, No. 8, 12–13.

statement was read to the assembly. "Gentlemen," he wrote, "I presented myself to this august assembly adhering in heart and spirit to its dispositions, but not master of my will upon all subjects." He then explained that while his instructions did not forbid a common verification, in which he had always believed, unfortunately, they bound him to vote by order. These injunctions might not seem so imperative to some, but to him the obligation of an oath depended upon the idea attached to its taking. When he took the oath, he had believed himself bound to the idea of vote by order, and so he must still conceive it. Since this oath conflicted with his conscience, he had determined to return to his constituents to ask from them new instructions. If granted his freedom, he would take part in the labors of the assembly; if not, then his firm intention was to resign a mission which he could not conscientiously fulfil. He asked the assembly to recognize the purity of his motive, even if his conduct did not seem justifiable. If he was making an error, he asked their indulgence for an honest error.[60]

Just as this declaration had been read, Lally-Tolendal himself entered and expressed his regret that the state of his health had caused his absence, thus preventing his reading the declaration. Again, he avowed that the most urgent considerations which weighed equally upon his conscience and his heart had forced him to make such a statement. No one, he asserted, had tried more carefully than he to fulfil the duty to which he was called, as shown by his career in the chamber of nobles, with which several members of the assembly were acquainted. He ended by declaring that it took more courage for him to make this announcement than it ever would to defend the interests of the assembly in the most difficult circumstances.[61]

These statements of individual intention brought forth some debate in the assembly upon the matter and threatened to open the whole question of imperative instructions. Fréteau made the observation that the assembly could not take cognizance of

[60] *Procès-verbal*, No. 8, 7–9; *Point du jour*, I, 55–56; *Assemblée nationale*, I, 237–39. These three sources have the text of the declaration which was read. Duquesnoy (I, 133) mentions it.

[61] *Procès-verbal*, No. 8, 10–11.

this declaration or permit Lally-Tolendal to appeal to his constituents till the assembly had passed upon this subject. He held that the assembly must be master of all the individuals composing it and Target at once proposed that the assembly pronounce immediately upon imperative instructions. But Fréteau evidently believed that such deliberation should be postponed until all credentials were verified. Lally-Tolendal's statement, however, might be inserted in the minutes.[62] To this, Mounier is said to have retorted that in case of such disposition, the minutes would have to make mention of Target's motion also.[63] At this point the matter was dropped, evidently because of the announcement of the deputation from the nobles already mentioned.

A very similar declaration, verbal, however, was made by Clermont-Tonnerre when Bluget reported on the seven nobles and clergy, one of whom was Clermont-Tonnerre. His instructions, he stated, contained the order to form a constitution and one of the bases outlined for that was vote by order, subject to a decision by the majority of the nobility. But, on the other hand, the same article provided that the states-general might decide that the veto of one order should not prohibit the enactment of laws for the general welfare. Hence this was contrary to the principle adopted by his order, that the veto of each order was a basic principle of the monarchy. He felt that a condition so clearly hostile to the intentions of his constituents must be decided by an appeal to them. Until their decision was known, he did not desire to participate in the work of the assembly although he would remain in the hall.[64] Both of these deputies seemed to regard their constituency, rather than the assembly, as the final arbiters of their action. Yet it is quite evident that they took this more narrow view because of their earnest desire to support the assembly's policy of vote by head and majority rule.

[62] *Point du jour*, I, 57; *Assemblée nationale*, I, 239. The first source has Fréteau open the debate with Target as the second speaker; in the *Assemblée* the order is reversed. Perhaps Fréteau spoke before Target and again afterward, thus leaving no conflict. The two accounts vary on the details of what was said.

[63] *Assemblée nationale*, I, 239.

[64] *Procès-verbal*, No. 8, 13–14; *Point du jour*, I, 58; Duquesnoy, I, 133.

The third important incident in connection with the report of the committee of verification, was its decision relative to the Dauphiné contest reported by Hebrard.[65] Before the report was made, the Archbishop of Vienne and his colleagues, with the exception of Pison du Galland who was acting as secretary, withdrew, in order, we are told, that the assembly might be perfectly free in discussing the matter.[66] The nature of the contest undertaken by some Dauphinese clergy and nobles was explained to the assembly in a printed document distributed among the members—so the minutes state—and Hebrard, it appears, confined himself to the work of the committee.[67] The unanimous opinion was that the challenge had no foundation and the assembly immediately confirmed this, declaring the representation of Dauphiné legitimate,[68] but not prejudicing the method of choosing future deputations,[69] a matter upon which the assembly would decide. On his return, the Archbishop of Vienne thanked the assembly for the confidence shown in them and added: "Permit me to say to you that this province has some claim to the confidence of the assembly because of its zeal for the public welfare,"[70] referring to the part Dauphiné had played in the year just preceding.

In addition to the committee reports, the organization of the assembly was developed by the further enlargement of committees. The nobles chosen for the committee of verification the previous day, were, with a few changes, made permanent members. Sixteen nobles, among them the Duc d'Orléans, went to the committee on food supply, ten to that of redaction, and the same number to that on rules. In the same connection,

[65] *Procès-verbal*, No. 8, 14–15; *Point du jour*, I, 55; Duquesnoy, I, 133; *Assemblée nationale*, I, 236; Biauzat, I, 146; Jallet, 104. The last-named source includes this under June 25, but it is clearly wrong.

[66] *Point du jour*, I, 55; *Procès-verbal*, No. 8, 15.

[67] *Procès-verbal*, No. 8, 14.

[68] *Procès-verbal*, No. 8, 15; *Point du jour*, I, 55; Duquesnoy, I, 133; *Assemblée nationale*, 236; Biauzat, II, 146; Jallet, 104.

[69] *Point du jour*, I, 55; Biauzat, II, 146; *Procès-verbal*, No. 8, 15; Jallet, 104. This deputation from Dauphiné had been elected by the provincial estates, instead of by the three orders in separate assemblies.

[70] *Point du jour*, I, 55; *Procès-verbal*, No. 8, 15; *Assemblée nationale*, I, 236.

several changes were made. In the committee of verification, two *curés*, MM. Viochot and Guépin, took the places of the Abbé d'Abbecourt and the Abbé de Villeneuve. M. Royer was substituted for *Curé* Gouttes in the committee of redaction. Five of the clergy, MM. Brouse, Genetet, Guiniot, Gibert, and Le François, were in part added to the committee on food supply and in part substituted for other members.[71] As usual, the committees were notified to meet for work that evening.[72] Besides the committee work, the intervals during the session seem to have been given over to the reading of past minutes. Those of June 15, 16, 17 and 19 were read to the assembly.[73]

Another matter of organization is said to have been broached in this session. Duquesnoy and Boullé both state that Bailly proposed to resign and to have an election held the next day, doubtless that all orders might participate. But Duport, a noble, opposed such action until all the orders were united and his fellow nobles seem to have supported his view.[74]

A further subject of consideration, toward the close of the session, was the old affair of the military investment of the hall. As to the deputation decided upon June 25, the Archbishop of Vienne announced that he had taken some steps looking to its reception by the king. While he had no positive assurance, still he felt reasonably certain that it would be admitted to the royal presence.[75]

[71] Biauzat, II, 143; *Procès-verbal*, No. 8, 25–27; *Point du jour*, I, 59; *Assemblée nationale*, I, 248. The *Procès-verbal* gives a detailed account of the changes made.

[72] *Point du jour*, I, 59; *Procès-verbal*, No. 8, 27.

[73] *Procès-verbal*, No. 8, 15; Duquesnoy, I, 137; *Assemblée nationale*, I, 248.

[74] Duquesnoy, I, 137; Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 79; *Assemblée nationale*, I, 269. The latter gives, in the report of the session of June 30, this notice relative to an election of officers: "Le 27, à la séance du matin, M. Bailly avait proposé de nommer les officiers; mais cette nomination avait été remise." Either this writer made a mistake in the date, or else Bailly broached the matter again, June 27. No other source mentions his having done so. It seems not improbable that the reference is to the same thing as reported for June 26.

[75] *Procès-verbal*, No. 8, 25; *Point du jour*, I, 59; Duquesnoy, I, 137; *Etats-généraux*, *Extrait du journal de Paris*, I, 116; Boullé, *Docs. inédits*, *Revue de la rév.*, XIII, 78.

Apropos of the same matter, Target read the project of an address which, it was intended, should be presented by the deputation. It had already been submitted to the committee of redaction to which Target belonged, but it did not meet the approval of the assembly, so was returned to the committee.[76] Its language, its arraignment of the offenders in court circles, who were believed to be responsible for the position of the assembly, and its bold outlining of policies are hinted at as the causes of rejection by the assembly.[77] The conservative, Duquesnoy, characterized it as full of bombast, of vague declamations against the "flatterers of the king who slander the nation, as a ridiculous apology for the conduct of the commons; not a word of union, although the deputation is composed of the three orders." He continued: "It seems very strange that in ten or a dozen lines, M. Target alone should have laid down the principles of the constitution and have indicated the respective limits of the rights of the nation and of the royal authority."[78] Even if it had not been immoderate in tone, the assembly could not have afforded to throw prudence to the winds under the conditions then existing. It was gaining in strength without doubt, but still it could not assume the responsibility for an

[76] *Procès-verbal*, No. 8, 25. The name is not given. *Point du jour*, I, 59; Duquesnoy, I, 136; *Assemblée nationale*, I, 247; *Courrier de Provence*, *Lettre XIV*, 4. The *Assemblée nationale* says the project had been presented to the Archbishop of Vienne, also, but the *Point du jour* seems to make him partly responsible, at least for its return. " M. l'archevêque de Vienne, en donnant des éloges au style eloquent de cette adresse, a demandé de réfléchir sur certains articles; elle a été renvoyée de nouveau au comité." Duquesnoy indicates that it was not returned to the committee: " On a nommé 6 commissaires de la noblesse qui avec 6 du clergé et 12 des communs, doivent revoir ce projet ou en faire un nouveau." Perhaps the membership of the delegation that was to take the address to the king has been confused with those who were to draft the address. *Etats-généraux*, *Extrait du journal de Paris*, I, 116–117. No name is given, but it says: " On a paru approver une grande partie de ce discours; mais il a été impossible de l'adopter dans son entier, sur une lecture rapide; il a été renvoyé à l'examen du comité de rédaction, qui, après les changemens qu'il croira nécessaires, le renverra au jugement de l'assemblée.

[77] Duquesnoy, I, 136; *Assemblée nationale*, I, 247.

[78] Duquesnoy, I, 136.

affront to the government which had force at hand to uphold its policy.

Although, as yet, no definite action had been taken by the government, the military situation showed no signs of improvement. The policy of the assembly in dealing with the matter seems to have been clearly comprehended by Le Hodey de Saultchevreuil, who wrote June 26: "The hall is still surrounded and to prevent all accidents the culpable prudence of the council has summoned a troop of pandours to be in readiness for any occurrence and to execute with more vigor the orders given by men who are the enemies of France, but whom, nevertheless, the council summons into its body." The cautious action of the assembly was explained on these grounds: "The deputies conceal within their hearts the chagrin which the conduct of the court inspires; circumstances induce them to stifle their murmurs that they may give the French nation lessons in subordination, and doubtless, they would prefer to owe to the love of the king rather than to the plenitude of their own power the revocation of an order which cannot last long."

Then he went on to show that the placing of troops around the hall of the estates was contrary to all custom and precedent: "Courts of justice, companies, corporations have the interior policing of their halls and the national assembly cannot be deprived of this right. It cannot deliberate in the midst of arms, it cannot be free when invested with troops; regiments cannot enter cities where the provincial estates are in session; there are reasons of justice and equity, customs, which prescribe to the court the conduct it should follow, unless it desires to persist in violating the liberty of an assembly representing twenty-four millions of men."[79]

XI

Matters connected with the presentation to the clergy and the third estate, of the decree passed by the nobility on June 25, engaged the attention of the nobility during most of their session on June 26. After the minutes had been read, the president gave

[79] *Assemblée nationale*, I, 232–33.

a brief report concerning the audience in which he had presented the decree to the king. He read his own speech and the short response of the king, which expressed the latter's satisfaction with the conduct of the nobility and which assured them that they could count upon his kindness and protection.[1]

The president then named eight nobles under the leadership of the Count de Lachastre to present the decree to the clergy.[2] The chamber voted that it should be communicated to the third estate in a similar manner. But, in view of the antagonism of that body to the policy of the nobility, the handling of this affair became a matter requiring special attention. Evidently, the deputation to the clergy, or its leader, formulated the address delivered to that body,[3] but the content of the speech to be delivered to the national assembly was considered by the whole chamber. Two members had prepared projects for discussion. The first, said to have been very detailed, apparently explained and justified the policy of the nobility. The minutes of the order which do not give its content, merely state that it comprised not only a statement of the motives of the conduct of the nobility up to that day, but also the course which they intended to pursue in effecting the great work in which they were to co-operate. The evident necessity of a careful examination of every phase of this discourse, lest it contain something which might be wrongly interpreted, led the assembly because of lack of time to lay it aside and consider the second project which was briefer. To salve the feelings of the author of the first, it was explained that it would fit perfectly some other occasion when there was need of justifying the motives of the nobility.

[1] *Procès-verbal . . . de la noblesse*, 295. Neither speech nor response is given in the *Procès*.

[2] *Ibid.*; Barmond, *Récit*, 274. The *Procès-verbal* gives the following members: Vicomte de Chalon, Comte de Lachastre, Comte de Versay, Vicomte de Mirabeau, Comte d'Andlau, De Piis, Comte du Ludre, Marquis de Ternay. The minutes of the clergy mention no names, not even the names of the spokesman.

[3] *Procès-verbal . . . de la noblesse*, 297. The *Procès* omits all reference to the drafting of the address used by the deputation to the clergy. The Comte de Lachastre read it when he reported to the nobility after the return of the deputation, probably, or the whole group formulated it.

The second project was read again and passed by a large majority.[4] In the meantime, the deputation to the clergy returned and reported.[5] Then the president named the six nobles who, through the decree that they bore,[6] went to flaunt before the national assembly, the action of their order, which ignored all the principles for which the commons stood and accepted all that they had rejected.

The report of Bailly's response to the deputation given to the chamber by the Duc de Liancourt evidently provoked intense excitement among the nobility.[7] The conservative Duquesnoy, who criticized the reply of Bailly rather severely, heard that the nobles were especially irritated at the clause, *elle s'est portée à vous recevoir*, which made them feel that the third estate had deliberately attempted to humiliate the nobility. Duquesnoy declared that at the reading of this expression several nobles involuntarily placed their hands on the hilts of their swords, while the most moderate shared the general feeling of irritation. Some of the more hot-headed members wished to take immediate action upon the affront offered by the third estate. Duquesnoy continues that it was proposed that the nobility retire at once, place a veto upon all that had been done in the estates, and go in a body to the king, declaring that the third estate wished to deprive him of his crown, but that the nobility would defend it and would fly to his aid when he should call.

The more prudent members, however, prevailed upon the others not to take such extreme measures at once. A roll call of the chamber resulted in a very large majority in favor of postponing any further discussion of the matter until the next day.[8] Duquesnoy states that the Duke of Luxemburg said that he con-

[4] *Procès-verbal . . . de la noblesse*, 295–296. The vote is given thus: 165 ont été pour son adoption; 21 pour le oui, avec un léger amendment; 8 pour la majorité; 1 pour le rejetter; 5 n'ont pas eu de voix.

[5] *Ibid.*, 297.

[6] *Ibid.*, 296–297.

[7] *Procès-verbal . . . de la noblesse*, 298; Duquesnoy, I, 134–136.

[8] *Procès-verbal . . . de la noblesse*, 298. Duquesnoy does not give the figures upon the vote. The *Procès* gives the following result: "154 ont été pour remettre la déliberation à demain; 1 s'est rangé à la pluralité; 7 n'ont point eu de voix; 45 ont opiné pour déliberer sur-le-champ."

sented to the postponement only because, as president of the French nobility, he knew that a night would in no way alter its courage and firmness.

Duquesnoy felt that the answer of Bailly was particularly inopportune because a considerable number of nobles were working to influence the entire chamber to join the third estate.[9] There is other evidence that the question of union was being agitated to some extent. The Marquis of Montcalm is reported to have said, apropos of this matter: "I have thirteen thousand livres income, but I would sacrifice half of it to secure this union so much desired, and my six children would not disavow my act."[10] Duquesnoy believed that, had Bailly sent an urgent invitation to unite, instead of sharply rebuffing the overtures of the nobility, at least twelve or fifteen members would have left their chamber at once to join the national assembly. After this affair he felt that all hope of such action was lost.

The remainder of the session of the nobility was devoted to matters of minor importance.[11] Some nobles who protested against the election of the deputies from the bailliage of Aval were admitted to the bar of the chamber to read a memoir containing the reasons for their protests. Since the state of affairs was such that the chamber did not think of passing judgment in the matter, the memoir was turned over to the committee of verification to be used when circumstances demanded. The Baron de Poutet, deputy of the nobility of the city of Metz, had addressed a letter to the president asking the assembly to define his position in the body. Presumably on account of some irregularity in his election, he had been refused a seat in the chamber until the nobility of his bailliage had been convoked again by the king. For reasons not stated in the minutes, he explained that he had not yet been able to take advantage of this solution of his difficulties. Until he could do so, he requested that the assembly grant him a provisional seat and

[9] Duquesnoy, I, 135.

[10] *Le point du jour*, I, 60; *Histoire de la révolution*, I, 233. The *Histoire* evidently copied the statement from the *Point du jour*.

[11] *Procès-verbal . . . de la noblesse*, 298–299.

voice without vote, but the chamber postponed any immediate action upon his request.

Besides these matters, one of the members took occasion to remind the chamber that since it had been presided over by the Comte de Montboissier for almost six weeks,[12] it would be fitting to take measures to thank him for his services. This suggestion was unanimously applauded, so the president named a deputation to convey to the former president the gratitude of the assembly for his leadership. The Baron de Montboissier, the Duke of Havre, the Marquis de Juigne, and the Marquis de Clermont-Mont-St. Jean, were appointed to serve on this committee. Then the chamber adjourned until nine o'clock the following morning, June 27.[13]

XII

The whole course of the national assembly on June 26 had been more or less a matter of marking time and of upholding its policy by inaction. Even the nobility did little more that day than complete the work of the previous day, and it definitely refused to deal with the covert challenge to its legitimacy, implied in the response of the national assembly to the deputation from the nobility. The minority of the clergy, however, displayed more constructive activity when, in accordance with the order of the day, it outlined the principles of the decree abandoning the pecuniary privileges of the clergy as an order.

The session of the clergy, however, was short, lasting only from half past nine to three.[1] After the celebration of mass, the Cardinal de la Rochefoucauld, gave a report for the deputation which had carried to the king the decree of the previous day respecting the first declaration of the king. The delegation had explained to him the sentiments that guided the assembly. The cardinal stated that their reference to the prospective renunciation of their pecuniary privileges, had been especially

[12] The *Procès-verbal* of the order shows that the Comte de Montboissier had been president until June 12 when the Duke of Luxemburg was elected.

[13] *Procès-verbal . . . de la noblesse*, 299.

[1] Barmond, *Récit*, 273.

pleasing to the king, who expressed himself as highly satisfied with the action of the clergy. The king concluded his response by promising to examine the clergy's request concerning the course it should pursue.[2] But evidently, lest the king forget his promise, the clergy agreed to use pressure by writing a letter to the guard of the seals, Barentin, asking him to remind the king of his promise and to solicit a prompt response. Doubtless in view of Barentin's well-known activity against Necker and in favor of the privileged classes, they considered him a highly valuable ally in holding Louis XVI in line. The clergy also gave a vote of thanks to the president and his associates for the way they had acquitted themselves in the affair of presenting the decree.[3]

The group of nobles bearing their long decree of June 25 was announced at this state in the proceedings, and several of the clergy were sent to receive the deputation. The spokesman, the Comte de Lachastre,[4] expressed the gratification of his chamber at the recent formal constitution of the chamber of the clergy, saying that the nobility had awaited with impatience the time when the first order would be organized. Since that step had been taken, the nobility had commissioned him to express to the chamber their satisfaction at the clergy's "eagerness to respond, with the utmost confidence, to the views of conciliation presented by the best of kings." "Our sentiments for him," the count added, "are the same. They are found in the decree which we passed yesterday, and which we are charged to bring to you." Then rising to heights of emotion, he exclaimed: "May the union which reigns between the first two orders, may the patriotism which inspires them, maintain the constitution of the fairest realm in the universe, fix the crown firmly upon the most august head and cause this holy religion of which you are the faithful organs, and this noble firmness which, for so

[2] Barmond, *Récit*, 273–274; Coster, *Récit*, 343–6. Coster does not state that the president made the report. He adds that the king assured the chamber his special protection and promised it every security.

[3] Barmond, *Récit*, 274.

[4] *Ibid.*, The minutes of the clergy do not give the name of the leader, nor of the other members of the delegation. These are found only in the *Procès-verbal* of the nobility, pp. 295, 297.

many centuries, has been the portion of the order of the clergy and of the nobility of France, to contribute to the happiness of all.[5]

After the conclusion of his speech, the decree passed by the nobility was read in full.[6] The Cardinal de la Rochefoucauld responded by stressing the fact that all acts of the clergy had for their principle, attachment to the king and zeal for the welfare of all the people.[7] The deputation then withdrew, the customary honors being shown by the clergy to the departing nobles.[8]

The clergy meanwhile took up the problem of justifying their conduct on June 19, when the schism in their order first occurred. The hostile attitude of public opinion toward them made it very essential that the correctness of their position be shown. As already noted, Coster claims that action looking to this end had been contemplated on June 24, but evidently nothing had been done in regard to the matter until this session, when a member proposed that a narrative of the events that had taken place in their order since June 19 be prepared, and the proposition seems to have been adopted. Six commissioners, besides the officers of the chamber, were named to draft the memoir which was to be completed by the next day and which was to be printed with all the minutes up to that date. Coster adds that the committee was to meet at six o'clock at the chateau with the Archbishop of Aix where the draft would be made.[9]

With this matter out of the way, the *promoteur* reminded

[5] Barmond, *Récit*, 294–295; *Procès-verbal . . . de la noblesse*, 297. The texts are exactly the same.

[6] Barmond, *Récit*, 275–276; *Procès-verbal . . . de la noblesse*, 266; *Procès-verbal* of the national assembly, No. 8, 18–19. The texts in the first and third sources are identical with the exception of one word, but they vary slightly from the text in the *Procès-verbal* of the nobility. The variations are unimportant.

[7] Barmond, *Récit*, 276.

[8] *Ibid.*; *Procès-verbal . . . de la noblesse*, 297.

[9] Barmond, *Récit*, 276; Coster, *Récit*, 344. Coster refers to this after the deliberation upon the renunciation of pecuniary privileges. He does not mention the number forming the committee. The final proof of the action said to have been taken here is the existence of the *Récit de ce qui s'est passé dans l'ordre du clergé, depuis le 19 juin jusqu'an 24 du même mois.*, which was ratified by the assembly the next day.

them of their agreement to consider the renunciation of pecuniary privileges in this session. A vote, taken upon the matter, showed that the plurality favored the following opinions: (1) The clergy consented that all ecclesiastical property should bear taxes in proportion to income; (2) they were in favor of thanking the king for the abolition of the names of *taille*, *mainmorte*, *franc-fief*, and *corvée*; (3) the clergy would formally announce its desire to see the national debt consolidated as soon as it should have been recognized by the estates-general; (4) a decree embodying the sentiments and wishes of the clergy upon these matters would be drafted at once and presented to the chamber at the opening of the session the next day.[10]

In so far, the clergy were in practical harmony with the king's financial policy, probably hoping, as already suggested, to commit him fully to the support of their political ideals, which he seemed to have approved in the royal session. In this matter of finances, the clergy went further than the nobility, whose reference to the matter in the decree of June 25 showed that they insisted upon the realization of their political aims before the matter of finances was considered. But both clergy and nobles were in direct opposition in this, as in every other matter, to the policy which the third estate was upholding in the face of apparent odds.

XIII

Although the national assembly must have recognized, by June 26, that circumstances were slowly playing into their hands, they had no knowledge that these circumstances were about to modify the attitude of the government, decidedly to their advantage. On the other hand, the king and court themselves seem to have been unconscious that these circumstances, over which they had no control, would oblige them suddenly to reverse their tactics and to bring pressure to bear, not on the revolutionary national assembly, but on the conservatives of the upper orders, who, to a certain degree, were their own allies.

Without doubt, during the days from June 23 to June 26, the court cabal and the Barentin party of the ministry confidently

[10] Barmond, *Récit*, 276–277; Coster, *Récit*, 343.

believed that the government possessed the means to carry out the policy announced in the royal session. All sorts of positive steps were taken to enforce its program. First and foremost stood the exclusion of the public from the hall. The hesitancy of the government—amounting practically to a refusal—in receiving a deputation from the national assembly which desired to protest against the military guard about the hall, was but another side of the governmental policy.

The king had the speeches and declarations printed and sent copies to the three orders.[1] They appeared in the conservative papers devoted to government interests, as well as in the more radical organs of popular opinion.[2] Heralds were notified to cry them in the streets of Versailles, but this order was not executed, because "the heralds had colds."[3] The people of all France were to be reached by despatching copies of these documents to the intendants in the provinces. Biauzat incorporated in the report to his constituents on June 26, the copy of a letter from the government to the intendant of his own *généralité*. It ran as follows: "I hasten to send you, sir, some copies containing the discourses and the declarations given by His Majesty at the session which he held the 23d of this month in the estates-general of the kingdom. The intention of the king is that you have them printed immediately and posted in your *généralité* and distributed to the principal officers of the municipalities and even to the syndics of the parishes. It is possible that false notions respecting the object of this session may have been given; and the prompt knowledge of the truth can only inspire confidence and confirm more and more the paternal intentions of His Majesty."[4] Biauzat, however, warned his constituents not

[1] *Procès-verbal*, No. 6, 2; *Procès-verbal . . . de la noblesse*, 252; Barmond, *Récit*, 267.

[2] *Etats-généraux*, *Extrait du journal de Paris*, I, 94–107; *Mercure de France: Journal Politique de Bruxelles*, No. 27, 27–37.

[3] *Lettres et bulletins de Barentin à Louis XVI*, LV, bulletin, dated June 24: "J'avais donné des ordres pour faire crier les lois émanées hier de Votre Majesté; elles ne le sont pas encore, et sur la demande faite à plusieurs crieurs pourquoi ils ne criaient pas, ils ont répondu qu'ils étaient enrhumés."

[4] Biauzat, II, 143.

to be deceived by the king's action of June 23. He branded it as a "very insidious attempt to establish infallibly either a ministerial despotism or the aristocratic system."[5]

On the other hand, the reactionary entourage of the king were planning a resort to force should the third estate and its supporters prove obstreperous. Barentin, to whom several members of the minority of the clergy had carried complaints concerning the treatment accorded them by the populace on June 24, wrote to the king the next day urging repressive measures against the third estate. Apropos of that matter he stated; "The conduct of the chamber of the third [estate], the passion which characterized its deliberations yesterday, its decree of the day before, the apparent contempt which it displays toward the wishes of Your Majesty, all show how necessary it was that you preserve the principles of the monarchy. But it does not suffice, Sire, to have consecrated them, it is necessary to maintain them; and the more they are scorned, the more does it become the duty of a king to bring to a realization of the truth those who have gone astray. I shall take care not to propose to Your Majesty any act which may be contrary to the goodness of your heart, but yet, you owe it to yourself, to those of your subjects who are truly attached to you, finally to the legitimacy of your power to see to it that this power be not enfeebled or revolutionized during your reign." In conclusion, Barentin suggested that a council be held that evening to consider these matters. The continued military investment of the hall and the patrolling of the streets of Versailles by troops formed but one aspect of this policy. Regiments from distant garrisons, mostly foreign troops, were being moved toward Paris.[6] Boullé claims that some of these had already arrived.[7] According to

[5] *Ibid.*, 144.

[6] The matter of the concentration of troops in the region of Paris and Versailles is treated fully by Caron, P. "La tentative de contre-révolution de juin-juillet, 1789," in *Revue d'histoire moderne et contemporaine*, VIII, 5–34.

[7] Boullé, *Documents inédits*, *Revue de la rév.*, XIV, 26. He wrote on June 28. Salmour in Flammermont, *Les correspondances des agents diplomatique étrangers*, 231, reported the same day from Paris that two regiments, the Swiss regiment of Reinach and the Hussars of Lauzun, had just arrived.

Jallet,[8] the number of men ordered to the capital was sixteen thousand, but Boullé reported on June 28 that the number was more than twenty thousand. He adds that their headquarters were to be established at Saint-Cloud and a full train of artillery was to be brought from Flanders. All communication with Paris was to be broken off. With such a force at hand, the intimidation of the national assembly would become a possibility.[9]

In fact, rumors of a ministerial scheme to seize leading deputies were rife. Fear of such an attempt led the national assembly to adopt, on June 23, Mirabeau's motion declaring the persons of the deputies inviolable. Jallet had heard that, in the council held the evening of the royal session, violence against the deputies was advocated. The leading members were to be abducted and killed, the rest dispersed. He referred to another scheme for stationing two soldiers at the door of each deputy to prevent meetings. Reports were current that apartments had been prepared at the Bastille and at Vincennes to receive them, should the deputies be arrested. Biauzat wrote the night of June 25 that it had been proposed in a council of that evening to arrest some of the deputies to hold them as hostages, as it were, for what might occur in the provinces. He adds that he was warned at midnight that he had been honored by being included in the list. His colleague, M. Andrieu, had jested with him about it and he himself was going to bed without fear. Not that he wished to be lodged in the Bastille, but he did not believe that the intriguers would dare make an attack upon the liberty of the deputies. The next day, other deputies inquired whether he had not been informed that plots were being formed against the deputies, but he did not reveal what he had learned the previous midnight.[10]

[8] Jallet, 106.

[9] Boullé, *Documents inédits, Revue de la rév.*, XIV, 26.

[10] Biauzat, II, 141, 146; Jallet, 108–109; Hardy, *Journal de mes loisirs:* "Le bruit courait que l'intention de la cour était de faire arrêter un député par chaque bailliage pour les retenir en ôtages dans l'intérieur du château de la Bastille, où l'on avait vu arriver un grand nombre de lits et une grande quantité de matelas." Quoted in footnote, Biauzat, II, 141. Staël-Holstein (105) wrote on July 9: "Il est certain que peu après la séance royale le

Besides planning violence against the deputies, the court cabal was still suspected of plotting the downfall of Necker, in spite of the fact that on June 23 the king requested him not to retire and that he was, in a greater degree than ever before, the object of popular adoration.[11] The sentiment of the people was evidently his chief support. Although many deputies paid their respects to Necker during the demonstration on the evening of June 23 and although his letter to the assembly the next day had been enthusiastically received, contemporary accounts state that the national assembly was not seriously disturbed over his prospective retirement. Jefferson, who visited Versailles June 25, wrote to John Jay on his return: "The mass of the common chamber are absolutely indifferent to his remaining in office. They consider his head as unequal to the planning a good constitution and his fortitude [unequal] to a co-operation in the effecting it. His dismission is more credited today than it was yesterday. If it takes place, he will retain his popularity with the nation, as the members of the states will not think it important to set themselves against it, but, on the contrary, will be willing that he should continue on their side, on his retirement. The members of the states admit that Mr. Necker's departure out of office will occasion a stoppage of public payments. But they expect to prevent any very ill effect, by assuring the public against any loss, and by taking immediate measured for continuing payment."[12]

The same day, Young observed in Paris: "The criticisms that are made on Mons. Necker's conduct, even by his friends, if above the level of the people, are severe. It is positively asserted

projet était formé de faire arrêter trente députés et de disperser le reste." Biauzat (II, 146) refers to the " projet de faire arrêter dix à douze d'entre nous, comme un grand comte l'avait proposé," probably meaning the Comte d'Artois.

[11] *Bulletins d'un agent secret, La rév. française*, XXIV, 70, 72, 74, 76. This witness of scenes in Paris refers time and again to the attitude of the Parisian crowd toward Necker. June 26 he wrote: " M. Necker est consideré comme le saveur de la patrie, on ne parle que de lui, on prononce son nom avec attendrissement, jamais ministre n'a joui plus complétement de l'estime et de la reconnaissance de la nation."

[12] Jefferson, II, 487.

that Abbé Sieyès, Messrs. Mounier, Le Chapelier, Barnave, Target, Thouret, Rabaud, and other leaders, were almost on their knees to him, to insist peremptorily on his resignation being accepted, as they were well convinced that his retreat would throw the queen's party into infinitely greater difficulties and embarrassment than any other circumstance. But his vanity prevailed over all their efforts . . . ."[13]

Without naming any one concerned, Necker practically confirmed this when he wrote in his *Sur l'administration*:[14] "I resisted likewise the suggestions of those who considered my retirement as the epoch of a great revolution and tried to make me understand that such a determination on my part could not fail to be followed by a brilliant triumph."

June 26, Biauzat wrote home that Necker still held his position and that the latter had remarked that very day that he would keep his courage until death. "But why," queries Biauzat, "is he of the opinion that the distinction of orders is constitutional? I am much irritated with him on account of his error, which is causing us so much trouble. I hope that he will change his mind; but will there be time?"[15]

Duquesnoy noted on the same day that Necker's ministerial existence seemed uncertain,[16] while Boullé informed his constituents that Necker was said to have made, on the evening of June 26, preparations for a hasty departure.[17] Count Mercy, in close touch with the court at Versailles, reported in a despatch of July 4, that there was an idea which he characterized as insane, but which was supported even by some members of the royal family, of arresting Necker.[18]

That he possessed much influence in the government after June 23 is very questionable. Certainly he did not recover the confidence of the king, which he had lost during the week

[13] Young, 178–179.

[14] Necker, *Sur l'administration*, 114.

[15] Biauzat, II, 145.

[16] Duquesnoy, II, 137.

[17] Boullé, *Documents inédits*, *Revue de la rév.*, XIV, 27.

[18] Arneth and Flammermont, *Correspondance secrète*, II, 252, *Mercy to Joseph*, II, July 4, 1789.

before the royal session. His retention in the ministry was a matter of temporary expediency. Evidently he had no part in shaping the policy of the ministry, in which Barentin maintained his position. It is true that in his *De la révolution* Necker asserts that he regained his old authority and could have secured the dismissal of both Barentin and Villedeuil had he not magnanimously refused to demand this action of the king,[19] but Barentin denies that such was the case. He claims that Necker did ask the dismissal of the other ministers, but the king refused to comply with Necker's request.[20] And Necker himself, in his earlier work, *Sur l'administration*, written in 1791, admits that he had sought to obtain the dismissal of the ministers, but failed.[21] Although some contemporary reports refer to the expectation of Barentin's dismissal,[22] more speak of the uncertainty of Necker's tenure in office or of his lack of influence. The fact remains that Necker himself, and not Barentin, was the first of the ministry to be dismissed. It is reasonable to presume that his influence was somewhat proportionate to the degree of his security in office. Staël-Holstein wrote on June 25: "I am still ignorant of whether he has secured the necessary ascendancy to struggle against the intrigue of the Comte d'Artois." Biauzat claims to have heard from Necker himself that the latter knew nothing, on Saturday, June 27, of the letters sent to the intendants of the provinces. Mercy's despatch of July 4 implies that the court had not been heeding Necker's wishes prior to June 27.[23]

The action of the court and the Barentin faction indicates clearly that they understood that Necker's retention in the min-

[19] Necker, *De la révolution*, 309–310; 313.

[20] Barentin, 232.

[21] Necker, *Sur l'administration*, 114. He admits it by referring to the "inutilité de mes efforts pour obtenir le renvoi des ministres dont l'opposition à mes projects s'était ouvertement signalée."

[22] Dorset, I, 223; *Correspondance d'un député . . . avec la Marquise de Crequy, Documents inédits, Revue de la rév.*, II, 38; Branche, footnote of Biauzat, II, 139; Duquesnoy, I, 126.

[23] Biauzat, II, 145; Duquesnoy, II, 136–137; *Mercy to Kaunitz*, July 4, 1789, quoted by Wertheimer, *Revue historique*, XXV, 328; Staël-Holstein, 103; Jefferson, II, 487.

istry was merely a sop to public opinion. They were striving to put through a scheme which he had openly disavowed, so it was not to be expected that they would consult him as to its execution. Yet, curiously enough, Necker himself seems to have accepted the work of the royal session. Certainly, Necker had no intention, after June 23, of recognizing the national assembly, even though the annulment of the decree of June 17, proclaimed in the first declaration of the king, was more drastic treatment of the national assembly than he advised. His letter to the assembly on June 24, sent through President Bailly, contained only the expressions "the order over which you preside" and "your order"; nor was there any hint that he repudiated the declarations of June 23. His attitude toward the latter seems to indicate that his opponents ascribed to him deeper political insight and more strength of character than he actually possessed.

The people and the deputies in general, however, had no knowledge of Necker's true attitude. They still looked upon him as the champion of the popular cause in a reactionary ministry. As a result, the persistent rumors of his dismissal caused real apprehension. Mercy gave as his conviction that either his dismissal or his voluntary retirement would have resulted in an uprising of the people.[24] The threats against the persons of the deputies caused genuine concern. The presence of guards at the hall was a constant menace and the reported concentration of troops near Versailles and Paris created grave fears for the future. So far as the assembly could tell on June 26, it was still questionable whether the forces on its side would ultimately win over those the government had brought together to enable it to carry out its policy. As a matter of fact, the fear of an uprising in Versailles, evidence of insubordination among the troops there, and the possibility of an insurrection in Paris were suddenly to influence the court to such a degree that the complete union of the orders, at the instigation of the king, resulted the very next day. The various circumstances which culminated in this event must now be traced.

[24] Arneth and Flammermont, *Correspondance secrète du Comte de Mercy-Argenteau, avec L'empereur Joseph II, et le Prince de Kaunitz*, II, 252.

XIV

The swiftness with which the outlawed national assembly pronounced judgment upon the royal policy, proclaimed in the session of June 23, could not but have disconcerted court and government circles. Its determined persistence in its course during the following days, practically ignoring the fact that a royal session had been held, doubtless caused alarm. This apprehension must have increased when, on June 24, the attempt of the clergy to take action upon the king's declarations drove a hundred fifty-odd of their members into the national assembly. The addition of a large group of the nobility the following day, as well as continued accessions of individual members of the clergy and nobles raised the number in the hall of the national assembly to not less than eight hundred by the close of June 26. As already emphasized, popular opinion interpreted the attitude of all who sat within the general hall to be identical. All were looked upon as supporters of the policy of the third estate. The mere existence of a body which included at least two thirds of all the deputies to the estates-general was a constant warning to the government not to push things to extremities, especially when public opinion was solidly behind this body.

Without doubt, the attitude of the populace in Versailles, but more especially in Paris, was a most potent factor in determining the king's action on June 27. The tension in Versailles increased daily after the royal session. The attack upon the Archbishop of Paris was only one manifestation of popular antagonism to the conservatives. The same night, June 24, the windows of the church of Notre Dame were shattered, apparently from the inside. As a consequence, the king was prevented from attending a service there the next day in honor of the late queen.[1] During the most of the night of June 24–25, people surged through the streets of Versailles, while the soldiers remained under arms for patrol service. Boullé reported that the guards at the chateau were doubled the evening of June 24.[2] The next morning

[1] Jallet, 105; Boullé, *Documents inédits, Revue de la révolution*, XIII, 75. The latter does not tell how the king was prevented from attending the service.

[2] Jallet. 103; Boullé, *Documents inédits, Revue de la révolution*, XIII, 75–76.

more troops arrived in Versailles, among them, according to Boullé, all the body guards in quarters at Saint-Germain or elsewhere. Besides these, additional forces of French and Swiss Guards and also a large number of hussars, a regiment according to Jallet, appeared early on June 25.[3] Boullé adds that it was announced that still others were on the way. He asserts that to give a plausible pretext for this military investment of Versailles, rumors were spread that the country house of the Archbishop of Paris had been burned and that Chantilly, the country seat of the Duke of Condé, had suffered a similar fate, but neither report was true.[4]

Additional guards were placed around the hall of the estates the next day, as already indicated. The exclusion of the public, although by no means absolutely enforced, kept popular feeling at white heat and led, as has been shown, to an attempt to break into the hall despite the guards. Restrained from carrying out this project, the populace made further demonstrations of hostility against unpopular members of the upper orders. D'Eprémesnil, for instance, was saved from violence on June 25, only by the intervention of some deputies of the third estate. The popular Archbishop of Vienne, on the other hand, was embraced by fish-wives when entering his carriage.[5]

The hostility of the masses of Versailles toward the conservatives of the upper orders and their outspoken support of the third estate, were given a more serious aspect by the fact that the troops, upon whom depended the keeping of order in the city, gave increasing evidence of their adhesion to the popular cause. Jallet claims that when the hussars arrived, the French Guards gave them to understand that if they committed the least act of violence against any one, they themselves would be fired

[3] Jallet, 103, 106; Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 75, 77; Biauzat, II, 140.

[4] Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 75.

[5] Duquesnoy, I, 132. In the same passage, Duquesnoy relates the following incident also: "On assure que le duc de la Trémoille a osé dernièrement dire dans la galerie qu'il fallait pendre quelques députés du tiers état, et qu'un de ceux qui l'a entendu a dit tout haut: 'Il n'est pas possible que cet homme-là descende du brave chevalier La Trémoille: sans doute qu'il est fils d'un des laquais de sa mère.'"

upon.[6] Duquesnoy relates an incident of June 25 showing not only the temper of the guards at the hall, but the attitude of the people as well. The secretary of the Marquis de Brézé presented himself at the door of the hall, but the guards refused him entrance. He appealed to a passing deputy to introduce him, as he had a letter from his master to the president. The deputy replied: "I know neither you nor your master and I do not see what he can have to do in our hall." At this retort, the people loudly applauded the deputy and hissed the secretary.[7]

The French Guards, as indicated in the instances previously cited, were the first of the troops stationed in Versailles to show their sympathy with the popular cause. Very shortly after the royal session, however, the body guards in the city rebelled against the duties assigned to them, although evidently not from sympathy for the popular cause. Mounted body guards, it will be recalled, took part in quelling the demonstration against the Archbishop of Paris, but apparently the service required of them roused their antagonism. Jallet reports that on the following days, they refused to co-operate with a detachment of mounted police which was added to the guard at the hall, June 25.[8] Afterward complaint about the service which they had to perform was carried to their captain, the Duc de Guiche, evidently by one, or perhaps by two, of the under officers in the name of their comrades. They stated explicitly that their duty was to guard the person of the king, not to be mounted to fight the rabble. Consequently, they refused to do patrol duty and to serve around the hall of the estates. The duke promptly discharged the offending officers, to the indignation of the companies whom they represented and who now threatened to leave the service unless their comrades were restored. They sent a memoir directly to the king, assuring him of their loyalty, but demanding the re-instatement of the

[6] Jallet, 106.

[7] Duquesnoy, I, 132.

[8] Jallet, 106; *Boullé, Documents inédits, Revue de la révolution*, XIII, 76. The latter does not mention the mounted police, but refers to the body guards: "Nous avons trouvé la salle entourée comme les jours précédens et de plus un escadron nombreux de guardes du corps devant l'entrée et la sortie des prélats de la minorité."

dismissed officers. The king, Salmour adds, wrote at the bottom of the memoir, "I have always counted upon the fidelity of my body guards," and returned it to them. The latter were not appeased, however, although Duquesnoy reported on June 28 that one of the officers had been restored. They declared to the Duc de Guiche, according to Salmour, that if their comrade were not re-instated the king would have six hundred bandoleers at his disposition when their term of service expired at the end of June.[9] In face of such a spirit the order of the king given to the Duc de Guiche, apparently on June 25, presumably as a consequence of the disturbances of the previous evening, was not likely to be executed. Clearly these troops could not be depended upon to carry out such an order, although their defection was due, not to their sympathy with the popular movement, but to their repugnance toward the performance of ordinary police duties which the authorities were requiring of them. Their resentment toward such service was natural in view of the fact that both the men and the officers of the body guards came from the nobility.

The excitement in Versailles was mild, however, compared with the insubordination in Paris, where the Palais Royal was the center of the most extreme agitation. Bailli de Virieu, ambassador from Parma, in a despatch of June 29, gives a vivid picture of the intense excitement in the capital during the days after the royal session:[10] "The fermentation of spirit was so great from Tuesday, the 23d, to Friday, the 26th, that one might believe, from seeing and hearing the Parisians that a burning

[9] Jallet, 106; Boullé, *Documents inédits*, *Revue de la rév.*, XIII, 27; Salmour, in Flammermont, *Les Correspondances des agents diplomatiques étrangers*, 231; Duquesnoy, I, 141. Jallet simply states that two were dismissed, but says nothing as to how the complaint was made. Salmour says: "Un maréchal des logis, bas officier avec rang de lieutenant-colonel, est venu dire, au nom de troupe." He adds that the officer was dismissed. Duquesnoy has this: "On raconte qu'un un exempt et un maréchal des logis des gardes du corps du roi ont été déclarer au duc de Guiche etc." He adds that both were dismissed, but the *exempt* was restored. Duquesnoy states that it was possible that four companies would resign and Salmour indicates that six hundred men threatened to take this step.

[10] Bailli de Virieu, 99–100.

fever had seized them. This public inclination toward revolt was pushed to the point that two or three days of such madness would have produced, without fail, a violent crisis, the effects of which necessarily would have been fatal to the royal authority. In the squares and on the streets, one sees only crowds of people assembled, talking of the Estates-general; the words Third Estate and the Nation are heard constantly and form everywhere a deafening echo. Baggage carriers, shopboys, fishwives even take part in these conversations; in all the stores, clerks neglect customers to concern themselves with public affairs; finally the words 'Third Estate' become a war cry and all the speeches that are heard are those of men capable of anything, if the nobility and clergy persist in their determinations."

A member of the nobility who evidently spent much time in Paris, said that he would not be surprised to see a St. Bartholomew of the nobility and clergy; that he had heard with his own ears, an orator in the Palais Royal advise this.[12] Other contemporaries made reference to the fear of a wholesale massacre of the upper orders.[13] Ferrières, writing, to be sure, long afterward, said it was current rumor that the members of the majority of the nobility were to be murdered, and that the day for the massacre had been designated.[14]

Maleissye, an officer of the French guards, in speaking of conditions at the Palais Royal, evidently at this time, states that he heard a man, mounted upon a table at the doorway of the *Café du Caveau* say: "My opinion is that the king should be shut up in a convent, the queen at the *Salpetrière*; as to Monsieur and the Comte d'Artois, since they are badly educated children, it is necessary to send them to *Bicêtre* and if, at the end of six months, they have not reformed, we will see then what it will

[12] *Correspondance d'un député . . . avec la Marquise de Crequy. Documents inédits, Revue de la rév.*, II, 35.

[13] *Mercy to Joseph II.* Letter of July 4, 1789 published by Arneth and Flammermont, *Correspondance secrète du Comte de Mercy-Argenteau avec L'empereur Joseph II et le Prince de Kaunitz*, II, 252; *Bulletin d'un agent secret, La révolution française*, XIII, 546; Mounier, II, 5. The latter states: "Les factieux faisaient proposer, au milieu des attroupemens qui se formaient au Palais Royal, l'assassinat de ceux qu'ils appelaient les ennemis de la liberté."

[14] Ferrières, I, 6.

be needful to do." He adds that the speaker was applauded.[15]

Arthur Young corroborates the reports of excitement in the capital.[16] "The ferment at Paris is beyond all conception," he wrote on June 24; "10,000 people have been all this day in the Palais Royal; a full detail of yesterday's proceedings was brought this morning and read by many apparent leaders of little parties with comment to the people. To my surprise, the king's propositions are received with universal disgust . . . the people seem, with a sort of frenzy, to reject all idea of compromise, and to insist on the necessity of the orders uniting, that full power may consequently reside in the commons, to effect what they call the regeneration of the kingdom . . . . It is plain to me, from many conversations and harangues I have been witness to, that the constant meetings at the Palais Royal which are carried to a degree of licentiousness and fury of liberty, that is scarcely credible, united with the innumerable inflammatory publications that have been hourly appearing since the assembly of the estates, have so heated the people's expectations and given them the idea of such total changes, that nothing the king or court could do would now satisfy them."

On June 26 Young wrote again: "Every hour that passes seems to give to the people fresh spirit; the meetings at the Palais Royal are more numerous, more violent, and more assured . . . . In the streets, one is stunned by the hawkers of seditious pamphlets and descriptions of pretended events, that all tend to keep the people equally ignorant and alarmed . . . . The spectacle the Palais Royal presented this night, till eleven o'clock, and as we afterward heard, almost till morning is curious. The crowd was prodigious and fireworks of all sorts were played off, and all the building was illuminated; these were said to be rejoicings on account of the Duc d'Orleans and the nobility joining the commons."

Another eyewitness of events in Paris, the author of the *Bulletins d'un agent secret*, gives a similar picture of the situation. He stated that during the night of June 24–25, bonfires were

[15] Maleissye, 29.

[16] Young, *Travels in France*, 176–177, 181.

kindled and innumerable rockets fired in front of the Palais Royal and the Controle-général, while neighboring houses were illuminated. Any one who dared to criticize the demonstrations or to utter a word against the third estate was likely to suffer at the hands of the crowd.[17] An *abbé* who criticized the third estate was made to ask pardon on his knees and to kiss the ground and then apparently was soundly cudgelled. Desmoulins tells of others who were caned or chased from the Palais Royal.[18]

Another favorite method of expressing popular sentiments was through placards. The writer of the *Bulletins* reported that on the morning of June 25 a placard posted on the door of the Controle-général proclaimed the admiration of six thousand French citizens for Necker, "the new Sully, the guardian angel of France, the restorer of the country, the helm of the nation."

A similar placard, lauding the Duc d'Orléans for his popular virtues and invoking his protection for the people was on the door of the amphitheatre at the Palais Royal. Our informant adds that this was printed immediately and widely distributed to increase the strong sentiment in favor of the duke.[19] Apparently as he was in the habit of doing at intervals, the duke visited the Palais Royal only the evening before the placard

[17] *Correspondance d'un député . . . avec la Marquise de Crequy, Revue de la rév.*, II, 36; *La révolution française*, XXIV, 69–70.

[18] *Ibid.*, 71; Desmoulins, II, 84.

[19] *Bulletins d'un agent secret, La rév. française*, XXIV, 69–70. He gives the text as follows: " Vous, illustre descendant du plus chéri des Rois, august rejeton d'Henri IV, votre zèle patriotique vous confirme l'immortalité que votre ame élevée vous a déjà assurée. Comme guerrier, vous vengez la patrie opprimée; comme excellent prince du sang royal, vous soutenez la classe infortunée de la nation, et un concours de cinq à six mille citoyens du troisième ordre et de cette même classe viennent aujourd'hui dans votre palais vous prouver, avec une effusion de coeur, que le nom français garantit combien ils sont respectueusement reconnaissants de l'intérêt que vous avez pris à établir son bonheur. Veuille le ciel perpetuer vos illustres rejetons! Daignez, grand prince, appuyer la nation de votre puissante protection: elle en portera le souvenir jusqu'à la postérite la plus reculée.

Oh! grande et verteuse princesse! digne épouse d'un prince chéri de la nation, daignez partager ces voeux, ils sont purs et sans melánges. Vive monseigneur le duc d'Orléans! "

appeared.[20] His numerous visits to the capital were believed to have a very definite purpose behind them. It was generally assumed that a plot was on foot to place the royal authority in some form, in his hands, and there is evidence to indicate that a popular movement of some proportions aimed at such a change. One eyewitness in Paris, writing on July 4, 1789, says that he had seen manuscript placards which stated that if the Duc d'Orléans wished to accept the crown, sixty to seventy thousand men offered it to him. The Austrian ambassador, Mercy, believed that a movement in favor of the Duc d'Orléans existed.[21] The latter's own personality and his troubles with the reigning family, which culminated in his exile to Villers-Cotterets in his hereditary domain, inclined him to play a demagogic rôle. The situation in Paris and Versailles gave him excellent opportunities to act the part. Duquesnoy calls attention to his reputed utterance on his return from exile: "They will repent of this."[22] In fulfilment of that threat, it was commonly believed that he incited popular disturbances and demonstrations against the upper classes and the government.[23] His money was credited with providing the continual and enormous displays of fireworks at the Palais Royal.[24] Furthermore, as will be shown later, he was accused of causing, or; at least, of encouraging the disloyalty of the troops to the government. The corruption of both people and troops was highly essential if he meditated playing the rôle ascribed to him. That he did pose as a liberal and as a champion of the people is well known. Duquesnoy claims that the Abbé Sieyès drafted the duke's cahier, and that, although they were rarely seen together, they were on terms of intimacy.[25]

[20] Desmoulins, II, 84; Bailli de Virieu, 98. The latter gives an account of the duke's visit to the Palais Royal on June 18, when a very affecting scene occurred between him and the people.

[21] *Correspondance d'un député . . . avec la Marquise de Crequy, Documents inédits, Revue de la rév.*, II, 39; *Bulletins d'un agent secret, La rév. franç.*, XXIV, 70; *Mercy to Joseph II*, Letter of July 4, 1789, given by Wertheimer, in *Revue historique*, XXV, 327–8.

[22] Duquesnoy, I, 145; Maleissye, 15. The latter refers to his attitude toward the king.

[23] Young, 181; Duquesnoy, I, 145; Maleissye, 18–19.

[24] Young, 184.

[25] Duquesnoy, I, 145.

Laclos, a man notorious for his immorality and lack of principles, was the chief agent of the Duc d'Orléans in corrupting the troops and in influencing public opinion.[26] The strength of popular sentiment in favor of the duke and the fear that he might appropriate the royal power must have been factors which impelled the government to a circumspect course.

Some contemporaries were of the opinion that the tension in Paris lessened somewhat on June 26 on account of the improved conditions in Versailles, due to the continued defections from the upper classes and especially to the entrance of the Archbishop of Paris into the national assembly.[27] But it was on June 26 that the Palais Royal sent the deputation to the assembly. There could be no doubt that the masses of the capital backed the national assembly. Although the assembly of the electors of Paris also sent a delegation to the assembly on June 26, there is a marked distinction between the attitude of the electors and that of the crowd at the Palais Royal. The electors were not yet ready to resort to force to save the revolution. This is made clear by the fate of the measure proposed June 25 or June 26[28] by M. de Bonneville, inviting the national assembly to approve the formation of a citizen militia. The electoral assembly was so timid that, not only did it not vote the proposition, but it made no record of the proposal in its minutes.[29] At the same time, M. de Bonneville proposed to

[26] Besenval, II, 341; Duquesnoy, I, 145; Maleissye, 33; Staël-Holstein, 142.

[27] *Bulletins d'un agent secret, La rév. française*, XXIV, 73.

[28] *Procès-verbal . . . des électeurs de Paris*, I, 130, 132, 152, 155. The *Procès* of July 10 includes a motion of M. de Bonneville said to have been made June 26 for the first time. M. de Bonneville himself states, in connection with other motions made on July 10, that he made on June 25 the proposal to establish a citizen militia.

[29] *Procès-verbal . . . des électeurs de Paris*, I, 130, 132. No reference to the matter is found in the *Procès* for either June 25 or June 26. The writer of the *Bulletins* (*La rév. française*, XXIV, 75, 77) says in the first passage written June 27: "Il existe très sérieusement le projet d'expulser toutes les troupes étrangères qui sont dans la ville ou dans les environs de Paris. Les bourgeois veulent former une troupe et se garder eux-mêmes. Je sais très positivement qu'on s'occupe de l'exécution de ce projet." Two days later, he tells of the transfer of the electoral assembly from the *Salle du Musée* to the city hall and adds: "On a proposé de supprimer le lieutenant de police

invite the national assembly to transfer its sessions to Paris, should it feel the necessity of moving from Versailles.[30] This was a natural suggestion to make, in view of the fact that, since June 20, members of the national assembly had contemplated removal to Paris, or elsewhere, to secure greater freedom of action.[31] Such a move would have been highly approved by the radical populace of the capital.

In the face of such possibilities, the execution of its plans by force was the only hope for the government, but by June 26, it was very evident that the king could not rely upon the troops then at Versailles or Paris. Insubordination among the soldiery of the capital was much more marked than at Versailles, particularly among the French Guards, but it was a serious enough matter even at Versailles. The Marquis de Maleissye, an officer of the French Guards and Baron de Besenval, lieutenant colonel of the Swiss guards, agree in ascribing the responsibility for this situation to the arrogance and incapacity of the unpopular Duc de Chatelet, colonel of the French Guards, and to the machinations of the Duc d'Orléans and his agents.[32]

The Duc de Chatelet succeeded the much esteemed Duc de Biron in 1788, but by no means filled the latter's place. Immediately he began making changes in the traditional régime of the regiment, introducing many innovations which resulted in the alienation of the love and respect of both officers and men. He was positive in his notions, petty in the means employed, as well as arrogant in his manner and exacting in his

et d'établir une milice bourgeoise pour la garde de la ville. Ces deux propositions ont été admises et l'on travaille à réunir les titres de la ville que établissent son droit sur ces deux points." Thus news of the activities of the electoral assembly was abroad, although for several days it did not officially recognize that such proposals had been made.

[30] *Procès-verbal . . . des électeurs de Paris*, I, 132.

[31] Young, 171; *Assemblée nationale*, 162; Bailly, I, 189; Mounier, I, 296; Duquesnoy, I, 125.

[32] Besenval, II, 351; Maleissye, 10–11, 15, 21–22; Ferrières, I, 479–495. The appendix of Ferrières contains the *Exposé de la conduite de M. le duc d'Orléans, dans la révolution de France, rédigé par lui-même, à Londres.* The duke frankly admits that he had mingled with all classes of the French people and also that he was accused of bribing the French guards to join the popular cause, but, of course, denies the charge that he corrupted the guards.

requirements, according to the characterization by Maleissye. To illustrate his methods, the latter states that several times the colonel had a certain quantity of wine distributed among the companies to win their favor, but this action was soon turned against him. For several months, the king had granted each man an additional sum of a sou and a half per day, but the men had not been informed of this by the colonel, who held the money back. At last rumors of this state of affairs got out and the troops demanded, in the most seditious manner, that an accounting be made. The colonel complied with the demand, but, to the disgust of the men, he took care to count out the cost of the wine which he had distributed.[33]

Naturally, the discipline of the regiment suffered under a commander of this type. Besides the unpopularity of the Duc de Chatelet, the harshness of the military régime and the economic circumstances of the time created intense dissatisfaction among the troops. Maleissye shows that the poor pay of the rank and file, the lack of effort on the part of their superiors to provide comforts for the soldiers after fatiguing marches, confusion in orders which tended to irritate the men, and finally the indifference of the majority of the upper officers to the service—all of these things served to alienate the troops and open the way for corruption. He says that he himself never saw either M. de Besenval or the Duc de Chatelet except in civilian attire.[34] The upper officers in general were rarely seen by their men, to say nothing of becoming acquainted with them. All the real work was left to the under officers,[35] who had little in common with the aristocratic commissioned officers.

While the latter spent much of their time in the gay society of Paris and Versailles, the lower officers and the men were overworked and underpaid. Nine sous per day were wholly insufficient to support a man in view of the high prices of food in the spring of 1789. Maleissye explains that it was necessary to send a certain number of men from each company into the city to work, that their wages and their absence from the barracks

[33] Maleissye, 33–34.
[34] Maleissye, 35.
[35] *Ibid.*, 35; Besenval, II, 352.

at meal time might help to solve the food problem. That situation rendered these men particularly susceptible to the influence of the revolutionary sentiments that stirred Paris in the spring and summer of 1789. Those who worked in the shops were seduced and returned to win over their comrades.[36]

Since the rank and file of the French Guards came from the common people, especially of Paris, it was very natural that they should sympathize with the aspirations of their friends and relatives in the great reform movement of 1789. Unlike the aristocratic body guards or the foreign Swiss Guards, their interests were identical with those of the people of the capital. They did not need to be seduced to be made conscious of that fact.[37] On the other hand, the guards were thrown into direct contact with the revolutionary spirit of the masses through the fact that, in the spring of 1789, they were called upon to render a larger amount of police service than usual. The uneasiness of the population of the capital, due to the threat of a bread famine and the drifting into Paris of large numbers of unemployed persons of all sorts, rendered the matter of keeping order too large a task for the ordinary police and guards of Paris. Consequently, the two regiments of Swiss and French Guards were called to their aid.[38] Naturally, their duties threw them into direct touch with all the currents of popular opinion, and rendered them particularly susceptible to outside influences of circumstances or of persons.

Maleissye places the beginning of the corruption of the French Guards about the first of May, immediately after the uprising in the Faubourg Saint-Antoine against Réveillon, the wealthy paper manufacturer.[39] Although the economic circumstances of the time, combined with the presence of large numbers of

[36] Maleissye, 19.

[37] Flammermont, "Les gardes les françaises en juillet 1789." *La révolution française*, XXXVI, 12–24.

[38] Besenval, II, 342–343.

[39] Bailli de Virieu, 82–85; Biauzat, II; Maleissye, 15–19; Jallet, 44–45; Jefferson, 459–460; *Histoire de la révolution*, I, 148–163. All give more or less detailed accounts of the affair; the fullest secondary acccount is found in Tuetey, A., *Répertoire général des sources manuscrits de l'histoire de Paris pendant la révolution française*, I, pp. XIX–XLVI.

vagabond agitators probably account for the outbreak, Maleissye and Besenval lay the responsibility for the whole affair upon the Duc d'Orléans. Maleissye's theory was that the duke had the insurrection staged to test the loyalty of the troops, especially of the French Guards. Since they showed practically no signs of defection, the Duc d'Orléans, through his agents, entered upon a systematic course of seduction.[40] The degree of the duke's guilt is problematical, although, of course, the support of popular opinion in Paris, without the backing of the French Guards would avail him nothing in furthering the schemes he was believed to cherish. As a matter of fact, the Duc d'Orléans appears to have been the dupe of a group of unscrupulous individuals like Choderdos de Laclos, who made use of the Orleanists' desire for revenge and the widespread hatred of the queen and court to further schemes of their own.[41] The duke's intimate association with such characters and his huge fortune naturally awakened the suspicion that he paid for the defection of the French Guards.

Wine, women, and money were designated as the means employed to break down the discipline and undermine the loyalty of the guards.[42] On the other hand, the circumstances noted above, without any additional cause in the form of bribes supplied by the Duc d'Orleans, would explain the adhesion of the French Guards to the revolution.[43] Yet it is a well-known fact that reputed agents of the Duc d'Orléans, especially M. de Valady, appeared in the quarters of the soldiers. M. de Valady was a former officer of the French guards who, it is said, left the service to escape a dishonorable dismissal. According to contemporaries, he had no visible source of income, but seemed to be rolling in wealth and went among the soldiers distributing

[40] Besenval, II, 348; Maleissye, 10–11, 15, 21–22.

[41] Rouff, "Le peuple ouvrier de Paris au 30 juin et 30 aout 1789," in *La rév. française*, LXIII, 439–441.

[42] Besenval, II, 358; Maleissye, 19.

[43] Flammermont, "Les gardes françaises en juillet 1789," *La rév française*, XXXVI, 12–24. Flammermont shows by copious quotations from contemporary writers, among others, from the Duc de Chatelet himself, that the French Guards were not an undisciplined, immoral force, open to bribery or ready to engage in any sort of disorder.

money in the most lavish fashion.[44] He is credited with saying: "Voilà pour boire à la santé du tiers-état et du duc d'Orleans!" Maleissye adds that one soldier to whom he gave a dozen livres carried them immediately to his captain. As a result, M. de Valady was pursued and arrested, but, because he was the son-in-law of the Marquis de Vaudreuil, deputy of the nobility from Castelnaudary,[45] he was treated as crazy. Although the circumstances were reported to the authorities, the king himself gave orders not to follow up the matter, and M. de Valady was soon at home again.[46]

The under officers were fully aware of the conditions produced by such activities among their men, but, Maleissye asserts, declined to report their knowledge to the Duc de Chatelet, who had forfeited their confidence by his treatment of them. Even when he did learn the true situation, he lacked the necessary strength of character, in the judgment of Maleissye, to take measures that might have saved the guards.[47]

[44] Duquesnoy, I, 145; Staël-Holstein, 142; Maleissye, 24, 33; Besenval, II, 341; *Correspondance d'un député . . . avec la Marquise de Crequy, Documents inédits, Revue de la rév.*, II, 40. The first four name Laclos as an important agent of the duke. Duquesnoy, Maleissye and the last-named source refer to Valady, or Valadi, as the name is sometimes spelled. Maleissye refers to a Chevalier d'Oraison also. Staël-Holstein gives the following as the entourage of the Duc d'Orléans: " M. de la Touche, son chancelier, le duc de Biron, son ami, M. Silleri, son capitaine de gardes, et surtout M. de Laclos." Then he refers to M. de Calonne as the London agent of the duke. There were rumors that English gold supplemented the resources of the Duc d'Orléans in fomenting popular demonstrations.

[45] Maleissye, 24; *Correspondance d'un député . . . avec la Marquise de Crequy, Documents inédits, Revue de la rév.*, II, 40.

[46] Maleissye, 24.

[47] *Ibid.*, 19–20; *Histoire parlementaire*, II, 29. The *Histoire* says of the disaffection: " En même temps, on apprit que les gardes avaient établi parmi eux une société secrète, dans laquelle ils s'engageaient à n'executer aucun des ordres qui leur seraient donnés, s'ils étaient contraires aux intérêts de l'assemblée nationale; cette société avait ses conseils, qui s'assemblaient le soir dans les casernes. Elle rédigeait des circulaires; et ce fut un de ces papiers, tombé dans les mains d'un officier, qui en révéla l'existence. Le soldat qui l'avait livre fut obligé de quitter le corps. Qui avait établi cette organisation? On l'ignore. Peut-être était-ce un patriote ancien officier des gardes-françaises, et qui fut noté alors comme distribuant des brochures aux soldats."

Presumably, all external signs of their corruption, in the form of indifference to, or neglect of, their duty, were lacking until the work of demoralization was practically complete. To Besenval, the best proof that the insurrection of the guards was cleverly directed, lay in the circumstance that, until its entire defection, the body did not commit the least disorder, but performed its service with the utmost exactitude, and very few members ever failed to answer roll-call.[48] Clearly, no direct evidence of any insubordination showed itself before the royal session. On the day before, however, two of the ministers, Montmorin and Saint-Priest, sent separate communications to the king who had asked their opinion of Necker's plan for the royal session. In urging that he accept it without modification, both stressed the possibility of the disloyalty of the troops if it were not adopted. Their line of argument was that the third estate would reject the plan if the contemplated changes were made, that, as a result, the estates-general would fail, and the treasury, which was empty, would remain so. Consequently, the troops could not be paid, and the king would be without any means of repressing the manifold disorders which would inevitably follow the separation of the estates-general.[49] Still, there is no indication that either man had in mind the then existing demoralization of the troops, or even that either had any knowledge of the situation at all.

According to Maleissye, insurrection openly appeared at Paris, the morning of the royal session. He states that the first company of grenadiers of the regiment of the French Guards, which was ordered to reinforce the guard in Versailles that day, refused to take bread, saying that the third estate had it for

The *Histoire parlementaire* is a compilation, but I have not been able to find the source from which this account was drawn, nor is it given in any other source available to me.

[48] Besenval, II, 352; Maleissye, 23. The latter tends to confirm the former on the matter of their attention to regular duties when he says, evidently in reference to the outbreak of June 25: "Ce qui peut paraître singulier c'est qu'à deux heures ces compagnies débandées eurent le plus grand soin de faire retourner à la caserne les soldats qui devaient être de garde aux spectacles, afin que le service se fît."

[49] The letters are quoted in full in the *Revue historique*, XLVI, 63–67.

them. The firmness of their officers finally induced them to do their duty.[50] He adds that it was only the fearlessness of the first lieutenant, M. de la Valette, which enabled the latter to bring them back the next day. He heard that market women awaited the troops on the route with wreaths of laurel and pitchers of wine. To avoid such a scene, he proposed to have them march by another route, whereupon they refused, but drawing his sword, the officer stood in the way and swore to kill the first man who attempted to pass.[51] At this, the troops stopped their murmuring and obeyed their lieutenant. A rumor which evidently was based upon no foundation in fact, but which was widely circulated in Paris, declared that the guards in Versailles, ordered to fire upon the people, some time during June 23, had flatly refused to obey the command. Despite its falsity, people persisted in believing it and it doubtless contributed its share to the popular agitation in the capital.[52] As previously noted in connection with the attack on the Archbishop of Paris, June 24, the French guards at Versailles did conduct themselves on that day in a way to make their loyalty appear very questionable.

From that date on, all accounts from Paris are filled with reports of the openly expressed disloyalty of the French Guards, of their hobnobbing with the crowds that surged through the

[50] Maleissye, 22. It is probable that Maleissye has attributed to June 23 events that occurred on June 25. Such a mistake would not be strange, since he wrote several years after 1789. Additional guards were summoned to Versailles for June 25. Jallet states, evidently in reference to June 25, that four companies of French and Swiss Guards were ordered from Paris, but that they refused to march. He might have heard of the incident related by Maleissye, who may have the date wrong. Still, Maleissye says that they went on June 23, but returned the next day.

[51] *Ibid.*, 26.

[52] Bailli de Virieu, 102; Desmoulins, II, 82; *Correspondance d'un député . . . avec la Marquise de Crequy, Documents inédits, Revue de la rév.*, II, 38. The latter says: "Pour augmenter cette fermentation, on a dit-on, imprimé, ou a publié que le jour de la séance royale on a ordonné aux gardes françaises de faire feu sur le tiers, mais que les soldats ont baissé les armes en répondant, qu'ils ne tireraient pas sur leurs frères." This man added that he had asked officers as to the truth of the matter and found it to be a fabrication, but people believed in the order as well as in the troops' refusal to execute it.

Palais Royal, of their being treated free of charge at the cafés, and of the eulogies pronounced in their honor by enthusiastic orators of the popular resorts. There was said to be a standing order at the cabarets to give the soldiers whatever they desired. It was generally assumed that the Duc d'Orléans provided the funds to pay the bills at the cafés.[53] Apropos of the treatment accorded the French Guards by the Parisian public, the author of the *Bulletins d'un agent secret* wrote on June 25: "I have seen several of them promenading upon the boulevards and in the Palais Royal, followed by a huge crowd which never stopped applauding them. I have been the witness of a most extraordinary scene at the Palais Royal. Several French Guards who went there with the intention of attracting notice were surrounded by the people and conducted in triumph to the café, where they were made to drink perhaps more than they wished. One individual mounted a chair in the Palais Royal, opposite the *Café du Caveau;* there, surrounded by more than ten thousand persons, he pronounced very loudly the eulogy of the French Guards. He was generally applauded. In the distance could be seen some French Guards half intoxicated, promenading in triumph." Two days later, the same man noted that the French Guards conducted themselves in their usual manner: "They circulate in platoons, become intoxicated and cry, 'Long live the third estate!'" He adds: "I have seen a strange sight. About sixty or eighty of the dregs of the populace joined and paraded inside and outside the city; one of them marched at the head and carried a banner upon which could be read very distinctly: *Vive le Roi! Vive M. le duc d'Orléans! Vive le tiers état!* This troop stopped before all bodies of the French Guards to salute them and then shouted at the top of their voices: *Vivent nos comarades!*"[54]

[53] Young, 180; Jefferson, II, 487–488; *Bulletins d'un agent secret, La rév. française*, XXIV, 70, 74–75; *Correspondance d'un député . . . avec la Marquise de Crequy, Documents inédits, Revue de la rév.*, II, 36–38; Salmour, in Flammermont, *Les Correspondances des agents diplomatiques étrangers*, 231; Dorset, I, 226; *Mercy to Jos. II*, in Arneth and Flammermont, *Correspondance secrète*, II, 252–253; Lescure, *Correspondance secrète*, II, 367; Bailli de Virieu, 106; Maleissye, 23; Besenval, II, 351. The last two did not write at the time, but both were in Paris during the time these events occurred.

[54] *Bulletins d'un agent secret, La rév. française*, XXIV, 70, 74–75.

The defection of the French Guards was generally known. Arthur Young wrote on June 25: "The confusion is so great that the court have only the troops to depend on; and it is now said confidently, that if an order is given to the French Guards to fire on the people, they will refuse obedience."[55] On the same day, a similar report was sent to the British government by Dorset, the English ambassador.[56] The next day, a noble in Paris stated: "Already the disaffection of the troops is assured: the French Guards have declared that they are the third estate and that they will never fire except upon nobles and ecclesiastics. The officers are no longer masters; one of them was struck by a soldier . . . . At the Palais Royal they are applauded to the limit, they are regaled with ices and liquors. They had some pensioners come also, and regaled them too. I heard one of these old soldiers from the *Invalides*, still very vigorous, reassure the people by saying to them that they had nothing to fear from the soldiers; that the troops are for the nation who pays them and not for the king who happens to command them."[57]

In fact, June 25 and 26 seem to have been days of the wildest license among the French Guards. At least since the day of the royal session, if not earlier, the officers had been instructed to keep the men in their barracks.[58] On June 25, however, a considerable number abandoned the barracks without leave and spread into the city, visiting public places and going to inns, or cabarets, where they were served without expense. On other details, the accounts of this affair vary rather widely.[59] Maleissye, who claims to have participated in it, says that two companies stationed in the Faubourg Saint-Antoine forced the sen-

[55] Young, 180.

[56] Dorset, I, 224–225.

[57] *Correspondance d'un député . . . avec la Marquise de Crequy, Documents inédits, Revue de la rév.*, II, 35–36.

[58] Besenval, II, 350–351; Maleissye, 22. The former does not state the date, but implies that it was before the desertion of June 25, of which, however, he does not give the date.

[59] Maleissye, 22–23; Besenval, II, 351; Salmour, in Flammermont, *Les Correspondances des agents diplomatiques étrangers*, 231; *Bulletins d'un agent secret, La rév. franç.*, XXIV, 70; Bailli de Virieu, 106; Boullé, in *Documents inédits, Revue de la rév.*, XIII, 27.

tinel about nine o'clock in the morning. As soon as he heard of the desertion, he hurried over into the Faubourg Saint-Morceau to see if there was a disturbance in that quarter. He set out to report to the colonel, but on the way, met the two companies, who were being brought back by an under officer who had hurried after them. He adds that he put himself at their head, hoping to rally them by the old, familiar cry: *Vive le Roi!* They responded; *Vive le Roi!. mais toujours le tiers état en avant!* An hour later the same companies again left the barracks and returned to the cabarets, where they were feasted. He states further that at noon a company stationed in the Faubourg of the Temple did the same thing.[60] Others reported that the guards went to the Palais Royal, where they fraternized with their fellow citizens. Salmour says that bands went to all the public places crying: *Vive le Roi! Vive le tiers état!* and then to the cabarets, where fanatics distributed handfuls of money to them. On Friday, June 26, he adds, they repeated their performances of the previous day and made several patrols of Swiss Guards lower their arms. The following day, they were kept in their barracks, only as the result of a personal appeal made by the Duc de Chatelet at every barrack. Nevertheless, other accounts indicate that French Guards were on the streets that day also.[61]

Many pamphlets, appearing during the days of unrest between the royal session and the union of the orders on June 27, confirm this testimony of various eyewitnesses concerning the defection of the guards. Most of these brochures were anonymous in origin, but some appear to be actual decrees, agreed to by the troops in their barracks. These seem to give conclusive proof that the king could not rely upon the troops in Paris. One pamphlet, entitled *Arrêté des soldats de la garde de Paris*, ran

[60] Maleissye, 22–23. He reports this affair of the French Guards as occurring on June 23, but evidently he is mistaken, for he wrote several years after the occurrence. No account written at the time mentions such an event on June 23, but what he tells seems to be the same incident referred to by Bailli de Virieu, Salmour, and the writer of the *Bulletins*, all of whom were in Paris, and Boullé, who was in Versailles, as occurring June 25. Besenval does not indicate the time directly.

[61] *Bulletins d'un agent secret, La rév. franç.*, XXIV, 74–75.

as follows: "Although we are not learned, we are not stupid enough to be persuaded that it is night in the full light of day, or that bladders are lanterns; no more can we be made to believe that our fellow citizens, our defenders, are our enemies . . . . In consequence we soldiers assigned to the guard of the city of Paris have unanimously decreed as follows: decreed that no guard will use his arms against his fellow citizens; . . . decreed, that under no pretext whatsoever will the soldiers of the guard assist in any act of authority against the national assembly, which they regard as the defender of France."[62]

Another pamphlet is ostensibly a decree passed by the grenadiers of the first company of the French Guards, evidently the same company which Maleissye says showed insubordination on June 23. The decree, which is dated June 24, the day they are said to have returned from Versailles, expressly states: "We, the undersigned grenadiers of the French Guards, . . . promise and swear upon our honor and our flags to defend our good king against all his enemies and to shed for him our last drop of blood, as we pledged ourselves to do on entering his service and as our hearts impel us to do. But . . . at the same time, we swear and promise the country to disobey every order, no matter where it comes from or by whom it may be given to us, which tends to deprive our good king of a single one of his subjects; and in case we should be ordered to fire upon the people, *nom d'un diable*, we swear to throw down our arms, and to go under the protection of M. Necker who will never permit brave soldiers to fight their fathers, their brothers, or their friends; let those scoundrels who give bad advice to our good king, learn, if they do not know it, that we still have in mind the siege of the palace! Let them not take it into their heads to have us undertake the siege of the estates-general! We would be rascals, if we marched against the worthy citizens who are in the national assembly, all of whom we regard like ourselves, as the fathers of the country and the friends of the third estate . . . . Done and decreed unanimously in the barracks

[62] Quoted in French in Becker, *Die Verfassungspolitik der französischen Regierung*, 265–266.

of the first company of French Guards, the afternoon of June 24, 1789."[63]

The next day there appeared an anonymous pamphlet purporting to be the *Lettre d'un grenadier des gardes françaises à M. le duc de Chatelet* which declared in part: "We have refused to arm ourselves against our own family. Yes, *Monsieur le duc*, if we are still supposed to cherish base and selfish motives, I am charged by all my comrades to assure you that every time you order us to be criminals, you will find us disobeying . . . . The title of French Guards does not impose upon us the necessity of dipping our hands in the blood of our fellow citizens. And now, my colonel, have you dared ask us to take the horrible oath to murder those who pay us to protect them?"[64]

On June 25, another curious public letter appeared, addressed to the Comte de Mirabeau ostensibly by a French officer upon the natural, necessary, and indubitable inclinations of the French and foreign officers and soldiers.[65] Opening with a eulogy of Mirabeau for his energetic and unflinching opposition "against the odious yoke of this aristocracy" and "against the ingenious vexations of this tyrannical government," the author in turn gave expression to a scathing denunciation of the "tyrannical ministry," the "criminal aristocracy," the "infamous clergy" and the "odious government." He branded as deserving of death, "those cowards who, judging French officers and soldiers by themselves, have dared, for an instant, to suspect their honor and their inviolable fidelity to the country; who have dared, for a moment, to think that French officers and soldiers, suddenly abjuring common sense and every sentiment of equity, humanity, and gratitude, would go at the orders of a ministry, tyrannical, atrocious, and always supported by the

[63] Quoted by Rouff, "Le peuple ouvrier de Paris au 30 juin et 30 août 1789," *La révolution française*, LXIII, 434–435.

[64] Quoted by Rouff, *La révolution française*, LXIII, 435–436. Excerpts from other pamphlets illustrative of the spirit of the French Guards are given in the same pages.

[65] *Lettre à M. le Comte de Mirabeau, L'un des représentants de l'assemblée nationale, sur les dispositions naturelles, nécessaires et indubitables des officiers et des soldats français et étrangers, par un officier français.* The pamphlet comprises 24 pages.

name of one alone whom they constantly deceive to besmirch themselves by the murder in cold blood, of their parents, their brothers, their friends, their allies, finally, of themselves."

Continuing, he made this stirring appeal: "French officers and soldiers, let us join against this culpable aristocracy, against this cowardly ministry, the impure source of the misfortunes of France. It is this monster that must be pursued to the last abyss; it is its members, constantly being renewed, that must be scattered at last; it is against these alone that our weapons must be turned; it is upon their trunk, mangled and bloody, that we must charge without pity; it is upon it that we must wreak our just fury, then rear the edifice of liberty."

The same day an "ancien camarade de régiment des gardes françaises" wrote an *Avis aux grenadiers et soldats du tiers-état*,[66] urging them to rise and share in the universal denunciation of aristocratic tyranny and participate in the regeneration of French society. He arraigned most bitterly the "military despotism" under which "for too long a time, a barbarous aristocracy has held our minds and bodies in an odious bondage." "They have dared to establish as a law the most absurd injustice. They have had signed by the king, by a king who loves his subjects like children, the absolute prohibition of receiving into the officers' rank any man who does not possess three degrees of nobility. They have pushed their extravagance to the point of refusing the insignia of valor to the soldier who has done prodigies of valor; had he the soul of a Brutus and the courage of an Alexander, he has been condemned to an eternal mediocrity because he made the mistake of being descended from Jean rather than from Pierre. . . . In short, we say that the officer gains all without doing anything, while the soldier does all without gaining anything. The latter alone keeps watch, marches, acts, fights; he alone truly employs in the service of the state all the moments of his unhappy life. And what, nevertheless, are the fruits of his long service? What rewards are reserved for so much perseverance and virtue? What aid is offered the disabled soldier? What asylums are open to the mutilated and

[66] *Avis aux grenadiers et soldats du tiers-état. Par un ancien comarade du régiment des gardes françaises.* This pamphlet contains 16 pages.

decrepit heroes who have, alas! for them, only their services and their misfortunes? In vain do they ask of the pitiless ministry a wretched pension; money is necessary to secure an audience; without money, the doors are closed, the ministry is deaf. Woe to the one who has, to support his claim, only certificates of honor and titles of fame. He will be set aside, rejected, even crushed if he insist; and the pension owed for his services will be given to a dancer or a courtier.

"Beside this disgusting list of the abuses of our present system, place for a moment an outline of the advantages which a new constitution offers us. In place of a condition of debasement, your condition will be respected. You will enjoy, from the public, the esteem and the consideration which the defenders of the country merit. . . . The suppression of the greater part of the governors, under-governors, commandants, lieutenants of the king and other useless officers whose appointments exhaust the state and are thefts made from the military treasury, will follow. Without all these thieves who devour our subsistence, the life and health of the soldier will be more assured; double pay will furnish us an honest living and this increase will add nothing to the burdens of the people, since it will be taken from the superfluity of so many useless beings to furnish the necessities for those who are useful."

Just as this frank critic of the old military régime was laying bare the reasons why the majority of the soldiery of France threw in their lot with the national assembly, he learned, so he tells us, of the oath and acclamation of the French Guards. The news roused him to a fresh outburst of patriotic fervor: "French, Europeans, inhabitants of two hemispheres, men of all ranks, of all countries to whom liberty is dear, know that on the 25th of June, 1789, in a city called Paris, three thousand brave soldiers have sworn 'to defend to their last breath, their country, their liberty, their prince, surrounded by a small group of scoundrels; to protect against any sort of violence their fellow citizens in general, and each of the members of the national assembly in particular; finally not to permit that any one among them be arrested or punished for this act of patriotism.'

"Brave soldiers of the third estate, in whatever rank, in what-

ever place you may be, thrill at this important news, follow so fine an example and merit by your actions to be counted among these guards, truly French."

By June 26 it was very clear that the French Guards were in full sympathy with the supporters of the national assembly and the indications are that other troops as well were showing signs of impending defection. Although Besenval asserts that the discipline among the Swiss Guards was perfect until July 12,[67] a correspondent from Paris reported on June 26, that the Swiss had formally declared to their colonel, M. d'Affry that they would not march.[68] He added that the regiment of Royal Cravate [cavalry], which had been in Paris since the last of April, had also explained itself. The action of a considerable portion of the body guards in Versailles has already been noted. This same writer reported from Paris, June 26, that it was asserted that only the company of Villeroy remained faithful among the body guards. Bailli de Virieu included in his report of June 29, however, a statement touching this very company. He said it was accused of having failed in military subordination in favor of the people on June 27.[69] The next day Boullé wrote home from Versailles that not only the French Guards there, but the Swiss and the hussars, in fact, almost all the troops had shown a similar inclination to insubordination.[70] Even the loyalty of the more remote troops seems to have been a matter of doubt. On June 29, Jefferson wrote to John Jay, that "similar accounts came in from the troops in other parts of the kingdom, as well those which had not heard of the *séance royale*, as those which had, and gave good reason to apprehend that the soldiery in general would side with their fathers and brothers, rather than with their officers." Of the effect of the knowledge of this general defection of the troops, he added: "The operation of this medicine at Versailles was as sudden as it was powerful."[71]

[67] Besenval, II, 343; Jefferson, II, 487–488. The latter states that disaffection had not appeared among the Swiss prior to the union of the orders.

[68] *Correspondance d'un député . . . avec la Marquise de Crequy, Documents inédits, Revue de la rév.*, II, 36.

[69] Bailli de Virieu, 106.

[70] Boullé, *Documents inédits, Revue de la rév.*, XIV, 27.

[71] Jefferson, II, 487–488.

XV

The result was an almost instantaneous change in the government's policy, for which Necker claims the credit. While the Artois-Barentin faction was planning the coercion of the third estate, apparently Necker was striving to induce the king to bring pressure to bear upon the upper orders. The method he suggested was a letter of invitation to the orders. Necker had first broached this idea in a secret letter written to Louis XVI on June 20, when the opposition within the king's council threatened to subvert his plan for a royal session. The letter stated: "I have been led to see some inconveniences connected with a royal session which I had not noted before, and it is believed that a simple letter of invitation would be better."[1] Apparently, his intention was to secure the substitution of that scheme for his previous project of a royal session. In that way, he would have cut the ground from under his opponents' feet.

Their opposition, however, had been powerful enough, not only to hold the king to Necker's original idea of a royal session, but to materially modify Necker's plan.[2] Necker was not dismissed June 23, apparently because of popular opinion and fear of the disastrous effect upon the financial situation. Of his own course after June 23, Necker says: "I was not slow, consequently, in profiting from the momentary renewal of my credit to ask His Majesty to write to the nobility and to the clergy, the letter which led to the reunion of the three orders."[3]

Necker thus assumes the responsibility for the union of the orders and Barentin, his most bitter opponent in the ministry, gives him full credit for the same. The latter charges that, at bottom, Necker's aim was to establish vote by head, which would abolish distinction of orders. He had been thwarted in this aim through the revision of his scheme for a royal session, but neither he nor his supporters outside the council had been

[1] Quoted by Lomènie, "Les préliminaires de la séance royale," in *Annales de l'école libre des sciences politiques*, V, 120.

[2] Becker, *Die Verfassungspolitik der französischen Regierung*, 195–209.

[3] Necker, *Sur l'administration*, 115.

disconcerted. Instead, "they conceived the project of seducing in different ways, the deputies of the clergy and the nobility; their batteries were directed against those timid, or irresolute, or accessible to corruption. No delicacy in their choice of means, all were adopted, even to deeds of violence." Barentin cites the attack upon the Archbishop of Paris as an example of their perfidy. Thus, while the populace, through acts of intimidation, tried to force the clergy and nobility into a single assembly, Necker, who was hand in glove with these conspirators, was urging the king to induce the upper orders to join the third estate. The king, trusting in Necker's protestations of devotion, was led to take the fatal step under specious pretexts. He was made to believe that he would prevent an impending division, evidently in the nobility,[4] although Barentin does not so state. The king's fears were aroused by tales of popular dissatisfaction at the inactivity of the estates for which the nobility in particular was blamed; by reports of the excitement in Paris and even in the provinces; finally, by reputed threats against his own life and that of the royal family. When the nobility hesitated to take the fatal step, then Necker and his partisans repeated their "perfidious insinuations" until the king commanded that the Comte d'Artois write the letter which finally broke the opposition of the nobles.[5] Such is Barentin's version of the manner in which the union of the orders was effected.

Presumably, both Barentin and Necker himself have misrepresented, ignorantly or purposely, or both, the degree of Necker's responsibility for the action of the king in bringing about the union of the orders. There can be no doubt, of

[4] Duquesnoy, I, 135–136; Note of Necker, quoted by Lomènie, *Les Préliminaires de la séance royale, Annales de l'école libre des sciences politiques.* V, 128. Duquesnoy wrote of the effects upon the nobility of the answer of Bailly to the deputation from the nobility on June 26; "On a proposé de se retirer à l'instant, de mettre un *veto* sur tout ce qui se ferait aux états." Of the effect of this attitude of the nobility he wrote: "Si demain la réunion n'est pas opérée, si la noblesse se sépare, j'ignore tout ce que ceci pourra devenir . . . ." On the morning of June 27, Necker referred to a "schism" declared by the order of the nobility and stated that some deputies would leave Versailles that evening.

[5] Barentin, 239–243.

course, that Necker desired a union of the orders in some sort of general assembly in which, by means of a vote by head, a solution of the urgent financial problems of the country might be reached. He had advocated such a scheme before the estates met.[6] Nor is there any doubt that Necker urged the union of the orders. There is extant his project of a letter to the king for that very purpose. There is no evidence, however, to indicate that he was intriguing to cause the destruction of the orders through vote by head. Far from influencing the king, the letter, as will be shown later, varies so widely from the one which the king sent to the clergy and nobles that it can hardly be said that the king did more than accept the idea of union by a letter of invitation.[7]

Circumstances other than the insistence of Necker doubtless caused king and court to request the union of the orders, although the king evidently adopted the method suggested by the minister. As to the time when action looking to the union of the estates was first seriously considered, it cannot have been later than June 26. By that date even if they had not been influenced by

[6] Fling, *Source Studies on the Fr. Rev.*, 7.

[7] Letter quoted by Lomènie, "Les Préliminaires de la séance royale," in *Annales de l'école libre des sciences politiques*, V, 128. The public believed that Necker was responsible for the letter when the reunion occurred, but rumors that it did not emanate from him were abroad on June 30. The *Assemblée nationale* (I, 280) makes the following comment: "L'on dit et peut-être n'est-ce pas sans fondement, que M. Necker n'est pas l'auteur de la lettre du 27, écrite par le roi à la noblesse et au clergé pour la réunion. M. Necker, dit on, l'a publiée lui-même; mais il a fait un secret du nom de l'auteur.

"Si cela est, a qui l'attribuerons-nous donc? Est-ce à M. de Villedeuil? On verra par la suite qu'il était bien éloigné de cette façon de penser. Est-ce à M. Vidaud de la Tour? Encore moins. Est-ce à M. de Montmorin, au ministre de la guerre, de la marine? L'on n'en parle nullement. Est-ce enfin à M. le garde des sceaux? Ce ministre avait intérêt de ramener la paix, de calmer les esprits un peu trop échauffés, surtout dans les communes: ce ministre pleurant la mort de son fils et la perte prochaine de son épouse; en butte, comme M. Necker, aux intrigues des autres ministres, aura sans doute, par ce coup imprévu et subit, cru ramener l'opinion publique, se consoler, par une belle action, des chagrins domestiques, et s'affermir plus que jamais contre les traits de ses rivaux.

"Avons-nous deviné l'auteur? Ne nous en flattons pas."

Necker's view, the crisis in affairs must have been perceived by king and court. The elements of the situation which Barentin brands as "specious" were very real, as has been shown. June 25 was the date when the rankest insubordination appeared among the French guards. Apparently, it was also the date on which the body guards under the Duc de Guiche openly rebelled against patrol duty in Versailles and appealed to the king. According to Jallet, it was the evening of June 26 when the court learned that ten thousand troops, said to have been ordered from the camp at Givet, refused to march. At the same time, the Duc de Chatelet had assured the council that, while they could count upon the officers, no reliance could be placed upon the soldiers.[8] It is hardly probable that the doings at the Palais Royal could have been unknown at the court. The electoral assembly as well as the Palais Royal itself bore to the assembly, on June 26, testimonials of the unflinching loyalty of the capital. A survey of these facts is sufficient to make it appear plausible that as early as June 26 the court must have felt the necessity of taking some steps to prevent a disastrous culmination of these circumstances. The statement of Count Mercy in his letter to Joseph II that, at this time, the court had already considered transferring itself to some place of safety, gives strong support to this idea.[9]

It is natural to presume that the ministry held frequent conferences in the days after the royal session. A council in the evening of June 23, another in the evening of June 25 and again in the morning and in the evening of June 26 are mentioned by persons outside court circles.[10] The one in the evening of June 26 is said to have been very long and to have been attended by the princes. The inference is that it had to do with the crisis in public affairs which menaced the safety of the court and the upper orders.[11] Early the next day, if we can credit the

[8] Jallet, 109.

[9] Arneth and Flammermont, *Correspondance secrète*, II, 252, letter of Mercy to Joseph II, July 4, 1789.

[10] Jallet, 109; Biauzat, II, 141, 143; Boullé, *Documents inédits*, *Revue de la rév.*, XV, 27, *Histoire de la rév.*, I, 234.

[11] *Histoire de la rév.*, I, 234.

meager available reports, as early as seven o'clock, the king and his two brothers were in conference in the royal apartments.[12] Soon there arrived the presidents of the clergy and nobility, the Cardinal de la Rochefoucauld and the Duke of Luxemburg. With them came also the Duc de Croy, vice-president of the nobility, and the Archbishops of Aix and Rheims. Coster states that they were summoned at eight o'clock. When the Cardinal de la Rochefoucauld returned to the chamber of the clergy, he explained that they had found all the royal family united and in the greatest distress. The direct cause was a warning received by the king from Paris that morning to the effect that, if the union of the three orders did not occur that day, thirty thousand men would set out, resolved to surmount all obstacles which might be opposed to them, in order to besiege the estates-general and then the chateau.[13] Count Mercy, in his dispatch of July 4, confirms this account in part. He states that, early in the morning of June 27, he went to Versailles to execute some private commissions of Joseph II and that, after the customary conference, he paid a visit to the queen. He found her in the deepest anguish as she let him see by her streaming eyes. She appealed to him for advice in such a critical situation. He adds that they had neglected to do anything that the circumstances demanded, but had done everything that should not have been done. Since what had been done could not be recalled, he took the liberty of presenting to the queen some general ideas relative to the avoidance of still greater misfortunes. He said to her that it was necessary, either to dismiss

[12] *Histoire de la rév.*, 234–235; Barentin, footnote, 243. The latter gives neither time nor place, but says that the king's brothers were with him when the presidents of the upper orders arrived. Moleville (I, 243), who evidently had the *Histoire de la rév.* before him, refers to the early conferences with the king.

[13] Coster, *Récit*, 344; *Procès-verbal . . . de la noblesse*, 300; Barentin, footnote, 243; *Histoire de la rév.*, I, 235–236; Moleville, I, 244–245. All refer to the attendance of the Duke of Luxemburg, president of the nobility. All except the second mention the Cardinal de la Rochefoucauld. Coster and Moleville name the Archbishops of Aix and Rheims. The *Procès* and Moleville mention the Duc de Croy.

Necker, or to keep him and then do what he desired. He added that in the case of dismissal, bankruptcy was inevitable.[14]

It may have been this influence which brought the king to accept the idea of union which Necker opportunely presented. It was that very morning that Necker drafted the project of a letter to be presented to the king. In explanation of the step, he wrote to some one not known: "If the king wishes, monsieur, to avoid today the schism declared by the order of the nobility and to prevent the departure of several deputies who leave Versailles this very evening, there is no other stand to take than to write to the president of the order the enclosed letter and to send it at the earliest possible moment, to anticipate all other deliberation. I ought to observe to you that it is essential to write the same thing to the clergy."[15] This communication is dated Saturday morning, presumably early, if the king were to anticipate action by the upper chambers which met regularly at nine o'clock.

Necker's conception of the necessary content of the letter follows:[16] "I have received with satisfaction the proofs which the order of the nobility has given me of its confidence in my fairness and of its respectful deference in adopting the dispositions contained in my two declarations of June 23. They have been dictated by my love for my people and my desire to effect their happiness. The second disposition of my first declaration invites the three orders to communicate their uncontested credentials. I desire that this communication be made today by the order of the nobility, which will betake itself for this purpose into the hall where the three orders assemble to communicate to the clergy and the third estate the *procès-verbal* of its verifications of uncontested credentials, with the documents which certify these, and to obtain from the other two orders the same communication. I await with confidence this new proof of the patriotism of the order of the nobility and of its inviolable attachment to its king."

[14] *Mercy to Kaunitz*, July 4, 1789. Quoted by Wertheimer in *Revue historique*, XXV, 327–328.

[15] Quoted by Lomènie, in *Annales de l'école libre des sciences politiques*, V, 128. The original is in the *archives nationales*.

[16] *Ibid.*

This letter makes perfectly clear that Necker, despite his opposition to changes in his plan, wished to make use of the features of the modified declarations which might aid in the attainment of the much-desired union of the orders. The first declaration provided for a general assembly upon matters of common interest, but guaranteed distinction of orders. The upper orders had sanctioned this arrangement, although many of the nobility, in view of prospective voting by head, should the orders unite, had made reservations. Evidently Necker believed that even though the union were forced upon the upper orders, the third estate could be restrained from putting into effect its plan for a truly national assembly without distinction of orders. The communication of credentials provided for in the first declaration afforded a plausible pretext for bringing about the union which would appease popular opinion and which, at the same time, was desired by the king and Necker.

The action of Necker, the probability of the retirement of some of the nobility, the desire to see the estates in operation, the king's knowledge of the prevailing insubordination among people and troops, the specific threat from Paris that morning, and possibly the advice of Mercy—doubtless all these factors induced the king to adopt the idea, although not the content of Necker's letter. Some accounts of the time even claim that members of the upper orders themselves asked the king to take such a step to save their faces, but yet release them from an intolerable situation of impotency.[17]

[17] Jallet, 106–107; Biauzat, II, 147; Lescure, *Correspondance secrète inédite . . .*, II, 367; Necker, *Sur l'administration*, 116. The first says: "La noblesse et le haut clergé se firent donner un ordre du roi de se réunir sans délai." Biauzat, in speaking of the union by letters to the deputies, adds: "Qui faisaient semblant de vouloir demeurer isolés dans les salles voisines et qui avaient mendié ces letres." Lescure reports rumor: "Enfin une lettre du roi sollicitée, dit-on, par les nobles récalcitrants, eux-mêmes, a mis d'accord leur amour-propre avec le seul parti qu'il leur restait à prendre." Necker somewhat substantiates the same idea: "Si le plus grand nombre des députés du clergé et de la noblesse eussent voulu manifester leurs secrètes pensées, ils seraient convenus que dans la position singulière où ils étaient, le roi ne perdait pas leurs intérêts de vue, en les decidant, d'une manière honorable pour eux, à une démarche inévitable." *Histoire de la rév.*, I, 233. The latter says on June 26: "La minorité du clergé, effrayée, de voir chaque jour diminuer

Evidently before the arrival of the presidents of the upper orders, the king had already decided to request the union. As Barentin surmises, probably they were summoned to ensure the success of the scheme through a personal appeal to the heads of the chambers.

The details of what occurred in the ensuing conferences rest upon accounts written from one to ten years after the occurrence. These accounts were not written by eyewitnesses. This naturally lessens their value and it is lessened even more by the fact that their sources of information are not known.[18] On his arrival, the Duke of Luxemburg is said to have presented to the king the decree passed by the nobility on June 26.[19] The interview between them is given at some length in the contemporary history by *Deux amis de la liberté*.[20] The king had the duke follow him into his cabinet where he began: "M. de

le nombre de ses prosélytes, s'était décidée à demander au roi la permission de se réunir à son ordre."

[18] *Histoire de la rév.*, I, 235–238; Moleville, I, 243–246; Barentin, footnote, 243; Droz, II, 195–197; Dorset, I, 226. Dorset had heard that the two princes conferred with the king Friday evening, June 26. Barentin merely states that there was a conference with the presidents of the upper orders in the presence of the queen and princes, during which the presidents tried to dissipate the fears of the king. The *Histoire* gives a very full report of the interview between the Duke of Luxemburg and the king, but nothing of the part taken by the representatives of the clergy other than that the Cardinal de la Rochefoucauld was called into the king's cabinet. This work appeared for the first time probably in 1790. A revised edition was printed in 1792, but there is no hint as to the source of its information. Moleville may have used it for the very brief account of the conference between the king and the duke, but Moleville gives additional material in the shape of a rather extended protest by the Archbishop of Aix, to which none of the other accounts refer. Droz may have used the *Histoire* as the basis of his narrative since the texts are identical, barring some omissions in Droz. The latter, however, states at the opening of the debate: "Voici une partie de leur conversation que le duc pour sa responsibilité, écrivit en quittant Louis XVI." This explanation may mean that Droz may have drawn from some contemporary pamphlet containing the statement of the Duke of Luxemburg as to what occurred. The writers of the *Histoire* may have used the same pamphlet which Droz used later. I have been unable to find any further evidence that the Duke of Luxemburg made such a statement as Droz suggests.

[19] Moleville, I, 243.

[20] *Histoire de la rév.*, I, 235–238.

Luxemburg, I expect from the fidelity and the affection for my person of the order over which you preside, its reunion with the other two orders." To this the duke replied: "Sire, the order of the nobility will always be eager to give to Your Majesty, proofs of its devotion for you, but I dare say to you that it has never given more striking proofs than on this occasion; for it is not its cause but that of the crown which it defends today." "The cause of the crown?" the king is said to have replied. "Yes, Sire," the Duke continued, "the cause of the crown. The nobility has nothing to lose by the reunion which Your Majesty desires. A consideration established by centuries of glory, and transmitted from generation to generation, its immense wealth and also the talents and virtues of several of its members will assure to it in the national assembly all the influence of which it can be solicitous, and I am certain that it will be received with rapture. But has Your Majesty been made to see the results of this union for you? The nobility will obey, Sire, if you ordain it; but, as its president, as the loyal servitor of Your Majesty, I dare implore you to permit me to present further reflections upon so decisive a step."

The king is said to have assented and the Duke made an elaborate argument against the union because it was baneful to the royal power: "Your Majesty," he continued, "is not ignorant of what degree of power public opinion and the rights of the nation discern in its representatives; it is such, this power, that the sovereign authority itself with which you are clothed remains mute in its presence. This unlimited power exists in its plenitude in the estates-general, in whatever manner they may be composed, but their division into three chambers checks their action and preserves yours. United, they no longer know a master; divided, they are your subjects. The *déficit* in your finances and the spirit of insubordination which has infected the army, engage, I know, the deliberations of your councils, but there remains to you, Sire, your faithful nobility. It has to choose at this moment between going, as Your Majesty invites it to do, to share with its co-deputies the exercise of the legislative power, or of dying to defend the prerogatives of the crown. Its choice is not a matter of doubt; it will die and it will not

ask any thanks; it is its duty. But in dying, it will save the independence of the crown and render void the operations of the national assembly, which certainly could not be accounted complete, when a third of its members would have been turned over to the fury of the populace and the weapons of the assassin. I adjure Your Majesty to deign to reflect upon the considerations which I have had the honor to present to you."

But the king was unmoved by the stirring argument. "M. de Luxemburg, my reflections are made. I am determined upon every sacrifice, I do not wish a single man to perish for my quarrel. So, say to the order of the nobility that I invite it to unite with the other two. If that is not enough, I command it, as its king, I will it. But if there is a single one of its members who believes himself bound by his mandate, his oath and his honor, let me say, I would go to sit at his side, and I would die with him if necessary."

There is some indication that the Duke of Luxemburg may have retired when the Cardinal de la Rochefoucald, as well as the Archbishops of Rheims and Aix were called in by the king. Moleville gives in his *Histoire de la révolution de France*, what is said to have occurred in the colloquy.[21] The king stated that the troops were in rebellion and that he was obliged to yield to the will of the third estate. "The troops in defection, Sire," cried the Archbishop of Aix. "Since when, in what places? Are these body guards, are they Swiss? Your Majesty did not know of this yesterday! Is it the work of a day—of a moment? The troops in defection, and Your Majesty learned it only today! The commanders, the officers, have they been in ignorance, or in the conspiracy? Have all betrayed the king? No, Sire, that is not possible, that cannot be true, they are deceiving Your Majesty, or they have been deceiving you for three months."

[21] Moleville, I, 245–246. The *Histoire* (I, 238) merely states that the Cardinal de la Rochefoucauld came next and says nothing of the conference. Barentin makes it appear, in his brief references to the conference (*Mémoire*, footnotes, 243) that whatever discussion there was, was heard in the presence of all the group, both the nobles and clergy, as well as the king, the queen, and the princes. Moleville gives the impression that there was first a private conference between the king and the representatives of the clergy and that this interview was concluded in the presence of all.

The king, embarrassed and shaken, had the clergy pass into another room where the queen, Monsieur and the Comte d'Artois, the Duke of Luxemburg and the Duc de Croy were gathered. The Archbishop of Aix, however, insisted upon his views: "Yes, Sire, yes, Madame, they are deceiving you to make you yield. They have given double representation to the third estate that it may have a double vote; they wish to grant it not only for some objects, but for all. Your Majesty indicates differences which they do not wish to admit. It preserves the interests of the king, those of the clergy and the nobility, they wish to destroy the orders and the royal authority is bound to fall with them."[22]

The objections raised by the duke and the archbishop must have made the king fully conscious of the dangerous possibilities of union, but they did not swerve him from his intention of asking the upper orders to join the third estate. Evidently, the court felt that public opinion must be appeased as quickly as possible. The letters of invitation were presented to the Duke of Luxemburg and the Cardinal de la Rochefoucauld to be carried to their respective chambers.[23]

[22] *Histoire de la rév.*, I, 238; Moleville, I, 246. According to Moleville the discussion continued for some minutes, the king adding that he would make known his response. This statement implies that the king did not give the letters to the presidents. The *Histoire* adds that Necker was summoned after the Cardinal, but made no explanation of the statement. It may have been to acquaint him with the king's decision to follow out his suggestion of union through a letter of invitation.

[23] *Ibid.*; Coster, *Récit*, 345; Boullé, *Documents inédits*, *Revue de la rév.*, XIV, 28; Barentin, 243–244, footnote. Boullé says that " un garde du corps chargé de cette lettre ouverte en avait donné lecture au peuple toujours assemblé près de l'hôtel des états avant de la remettre à la noblesse." Coster, who heard the Cardinal de la Rouchefoucauld report the circumstances of his visit to the chateau, states explicitly that the presidents brought the letters with them. Barentin implies the same, and the *Histoire* says that the presidents received the letters from the king. Moleville evidently is mistaken, while the story of Boullé cannot be taken seriously. Coster states that the one given to the Cardinal had written on the back: " A mon cousin, le cardinal de la Rochefoucauld."

XVI

The conference at the chateau delayed the opening of the session of the clergy, for Coster states that the Cardinal de la Rochefoucauld did not arrive until half past nine, whereas the usual hour for the sessions was nine o'clock.[1] But the letter of the king was not presented at once, for the mass for the dead was celebrated in commemoration of M. Le Guen, deputy of the *Prévôte* and *Vicomté* of Paris, whose death had been announced the morning of June 24.[2]

Without further delay, the president announced that he had received a letter from the king, and explained the circumstances surrounding its origin in so far as he had been connected with them.[3] The king's letter was then read to the doubtless highly astonished assembly. It was a simple statement addressed to the president personally as, "My cousin." No hint of the fears, said to have been responsible for its drafting, was evident when the king declared that "occupied solely with effecting the general welfare of my kingdom and desiring above all that the assembly of the estates-general busy itself with matters which interest all the nation, in accordance with the voluntary acceptance which your order has given my declaration of the 23d of this month, I invite my clergy to unite without delay with the two orders to hasten the accomplishment of my paternal views. Those who are bound by their instructions may dispense with voting until they shall have received new ones. This will be a new mark of attachment which the clergy will give me. I

[1] Coster, *Récit*, 344; Barmond, *Récit*, 277. The latter refers to the session having been adjourned until nine o'clock. The *Histoire de la rév.* (I, 238) states that the conference at the chateau was not over until eleven o'clock. Boullé states, however (*Doc. inédits*, *Revue de la rév.*, XIV, 28), that it was only eleven forty-five when the national assembly learned of the letter and the great opposition among the nobility. If the king and the court were convinced of the absolute necessity of the union of the orders, they would take steps to bring that about as early as possible. If the presidents were summoned at eight o'clock, as Coster, who would have a good chance to know, claims, without a doubt they could have returned by nine thirty.

[2] Barmond, *Récit*, 277; Coster, *Récit*, 344. The latter merely mentions the mass.

[3] Coster, *Récit*, 344–345.

pray God, my cousin, that he may keep you in his holy care." It was signed simply "Louis."[4] The pretext of their coming together, to communicate credentials, as suggested by Necker, was not mentioned. It was made perfectly clear that the king expected them to execute the provisions of the first declaration which they had accepted. It was just as clear that he intended that they should sit and act in common upon matters of common interest.

The *promoteur* requested that it be considered at once, so it was read a second time.[5] Without record of any debate, the clergy agreed unanimously to yield to the king's desire, provided that the nobility would do likewise.[6] The decree of acquiescence which they passed is long, because it is full of

[4] Barmond, *Récit*, 277–278; Coster, *Récit*, 345. The texts preserved in these two accounts from the clergy vary somewhat. The text found in the first follows: "Mon cousin, uniquement occupé de faire le bien général de mon royaume et désirant pardessus tout que l'assemblée des états-généraux s'occupe des objets qui intéressent toute la nation, d'après l'acceptation volontaire que votre ordre a faite de ma déclaration du 23 de ce mois, j'engage mon clergé à se réunir sans délai avec les deux ordres pour hâter l'accomplissement de mes vues paternelles. Ceux qui sont liés par leurs pouvoirs, peuvent y aller sans donner de voix jusqu'à ce qu'ils en aient de nouveaux. Ce sera une nouvelle marque d'attachement que le clergé me donnera, sur ce je prie Dieu, mon cousin qu'il vous ait en sa sainte gard. Signe, Louis. Ce 27 Juin, 1789." The Coster text is the same to *pour hâter* with two exceptions, *de* instead of *à* before *faire* and *invite* instead of *engage*. The remainder of the text follows: "Et j'attends de lui cette nouvelle preuve de son attachement. Ceux qui ont des pouvoirs limités peuvent y aller sans donner de voix, pour accélerer l'exécution de mes vues paternelles. Sur ce je prie Dieu mon cher cousin, qu'il vous ait en sa sainte garde. Signe, Louis. Le 27 juin 1789." The text in the *Histoire de la rév.* (I, 238), from which Moleville (I, 246–247) probably drew his text, is practically the same as that in Barmond. The following accounts give the text or refer to the letter of the clergy: Boullé, *Doc. inédits, Revue de la rév.*, XIV, 28; Jefferson, II, 488 (translation of text); *Letter from a deputy, Paris, le 27 à minuit* (appendix includes text of letter); Bailli de Virieu, 104; Biauzat, II, 146.

[5] Barmond, *Récit*, 278.

[6] *Ibid.*; Coster, *Récit*, 345; *Histoire de la rév.*, I, 239; Boullé, *Doc. inédits, Revue de la rév.*, XIV, 28. The latter heard: "Elle donnait lieu, comme dans la noblesse, à des débats." Both Coster (*Récit*, 348) and Barmond state that it was also agreed to write a letter to the king explanatory of the principles of the clergy.

explanations safeguarding the rights of their order. There is no information telling how it was drafted, for it is simply incorporated in the minutes of the clergy.[7] As the king justified his request for union on the basis of the policy announced in the royal session, the clergy also justified their consent on the basis of four articles, I, VII, VIII, and IX, found in the first declaration of June 23, each of these four articles being quoted in turn at the opening of the decree.[8] In view of these articles reserving all the rights of the clergy, in view of their own action in the decrees of June 24 and June 25 respecting the first declaration, and, finally, because of the king's letter to the Cardinal de la Rochefoucauld, "the order of the clergy, always eager to give to His Majesty testimonials of respect, love and confidence and justly impatient to be able to give itself up, at last, to the discussion of the great interest, upon which the national welfare depends," passed a double resolution. First, they declared their intention "to unite with the other two orders of the nobility and the third estate in the common hall in order to treat affairs of general utility, conformably to the declaration of the king, without prejudice of the right which belongs to the clergy, in accordance with the constitutional laws of the monarchy, to assemble and to vote separately, a right which they cannot and do not desire to abandon in the present session of the estates-general and which is expressly reserved to them by articles VIII and IX of the same declaration." In order to fortify their position yet more strongly, they decided, in the second place, "to address to His Majesty, a letter explanatory of the principles, preservative of the monarchy, which guided the order of the clergy and the sentiments of union and peace which decided it to adopt the plans of conciliation proposed by His Majesty, as well as to unite with the other orders in the hall of the estates-general."

[7] Barmond, *Récit*, 278–280; *Procès-verbal . . . de la noblesse*, 301–302. The texts are practically the same. The *Procès* quotes the full text of article I of the king's first declaration, while the *Récit* omits the last sentence. The text of the king's letter is not repeated in the body of the decree as given by the *Récit*, but the *Procès* quotes most of it. It is given practically the same as in the *Récit*.

[8] For full text of articles see *Procès-verbal* of the national assembly, No. 5.

Very clearly, the minority of the clergy had absolutely no intention of yielding in the slightest degree to the policy of the national assembly. They stood firmly upon their traditional rights, guaranteed in the first declaration of the king and were merely executing the policy laid down in the royal session.

Since the decree could be carried out only with the concurrence of the nobility, the Archbishop of Aix, who had attended the royal conference that morning, and the Abbé de Montesquiou, *agent-général* of the clergy, and *promoteur* of the chamber, were sent to inform the nobility of the action taken in response to the king's appeal, and to confer with the chamber of nobility in regard to the matter.[9]

Before that order acted, the clergy succeeded in clearing up most of their work laid out the day before. In the first place, their decree upon the renunciation of pecuniary privileges was read and approved.[10] Like the decree for union, the preamble was long and complex. It explained that "the order of the clergy, anxious to second with the most respectful attachment, the paternal wishes of the king for the happiness of his people, and in consideration of the fact that the unanimous desire of their constituents makes it more than ever a duty to fuse the temporal interests of the ministers of religion with those of their brothers and their fellow citizens; in order that today the abuses of the fiscal regime may no longer burden the country; and, that the justice of the sovereign may effect a revival, in favor of the other two orders, of the ancient liberties and national rights, preserved without alteration by the churches of France in all epochs of the monarchy"—it explained that, for all these reasons, the clergy agreed to the four propositions that follow.

The first pledged, that, "for the future, the holders of benefices, ecclesiastical bodies, and communities, would contribute, in the same proportion as other citizens to all royal, provincial and municipal taxes, and to all imposts agreed to by the three orders."

[9] Barmond, *Récit*, 280. Barmond says they "ont été priés d'aller conférer avec la noblesse en lui faisant part de l'arrêté qui venait d'être pris." The *Procès-verbal* of the nobility contains no reference to the appearance of these envoys to their chamber and the *Récit* says nothing of their return.

[10] Barmond, *Récit*, 280–281.

The second provided that the possessions of the church, submitted like lay property to the payment of the taxes necessary for the protection of the prosperity of the state, will serve, at the same time, as a mortgage and security for the payment of the national debt when it shall have been validated and duly verified. By the third, it was agreed "that in harmony with the beneficent dispositions announced by the king in the session of the 23d of this month, His Majesty will be asked to abolish completely without return, the name of *taille*, the use of the *corvée*, the rights of *main-morte*; to render drafting for the militia less burdensome to the poor people of the towns and country; finally, to convert the personal charges into pecuniary aids, to which the order of the clergy consents to be subjected."

The fourth stated that "in considering in the matter of the tax, the impositions most useful and most favorable to the law of proportional equality, it is just to indemnify, by supplementary appropriations, both the hospitals which the present law frees from all public contributions, and the *curés*, taxed as much as they can bear under the existing regulations of the clergy, upon a basis far lower than that which is used to fix the quota of other taxpayers."

As yet, no word had come from the chamber of the nobility, so the clergy next listened to the reading of the memoir ordered the previous day in justification of their action on June 19 and 24.[11] Evidently, the committee appointed to draft it did not complete their work the evening of June 26, for Coster states that it met at the Menus at eight o'clock that morning.[12] The result of their labor was a document of several pages, entitled *Récit de ce qui s'est passé dans l'ordre du clergé, depuis le 19 juin jusqu'au 24 du même mois.*[13]

It began by quoting, practically verbatim, the minutes of June 24 prior to the withdrawal of the majority of the order, which had been drafted by the minority secretary, Barmond.

[11] Barmond, *Récit*, 282; Coster, *Récit*, 348.

[12] Coster, *Récit*, 344.

[13] Published in *Overture des états-généraux, procès-verbaux et récit des séances des ordres du clergé et de la noblesse, jusqu'à leur réunion à l'assemblée nationale*, Paris, 1791, pp. 249–267.

The remainder of the *Récit* is devoted to the proof of three things: (1) that the deliberation of Friday, June 19, which, the majority claimed, had never been concluded, was a perfectly regular procedure, in which verification of credentials bv order, received the plurality of the vote; (2) that this deliberation had not been retracted by any subsequent action of the chamber of clergy; (3) that the assembly was justified in taking up the king's declaration of June 23 instead of resuming the deliberation of June 19, which had been legally completed.

In support of the first contention, certain fundamental laws of parliamentary procedure were reviewed and then applied to the deliberation of June 19, to show that each had been duly observed. In accordance with these principles, the vote had been legal, the count had been made in an exact manner, and the result had been checked by a roll-call, during which each member was given an opportunity to confirm or change his vote. Minor changes did occur, but these were recorded exactly, since several members favoring verification in common had charge of this work. Nevertheless, the plurality still lay with the adherents of separate verification. Hence, the president proclaimed this result, thus concluding a legal deliberation which could be invalidated only by subsequent action of the same regularly convoked chamber.

That no such action occurred was the next proposition demonstrated in the *Récit*. In the first place, nullification of the decree of June 19 could not have occurred before June 24, because no session of the chamber had been held between those dates. During that interval, the government suspended the sessions of all the orders to prepare the hall for the royal session. It was true that those who had opposed verification by order had held a meeting in the meantime. Such a meeting, however, was irregular, its decrees illegal and of no effect upon the action of the legitimate chamber of the clergy. In the second place, no deliberation contrary to that of June 19 occurred on June 24, when the next regular session of the clergy met. The minutes of the meeting quoted in the *Récit* clearly proved that fact. A large number did request that the result of the action of the previous Friday be stated again, before the king's declarations

were read. Before a decision on the matter was reached, however, the so-called majority abandoned the hall. Consequently, the decree of June 19 was still in force.

The only point open to question was whether the chamber was justified in taking up the declaration of the king first, rather than heeding the request of a large number of its members. The *Récit* stated that an examination of the circumstances and of the declaration itself showed that "it was a strict duty for the clergy to begin by considering the declaration." It was a duty of respect to the king to do so, because, on the one hand, he had ordered them, in closing the royal session, to meet the next day in their own halls; because, on the other hand, he had sent them copies of the declarations. It must have been his intention that they consider these. Furthermore, the very dispositions of the first declaration itself made examination indispensable before discussing the deliberation of June 19. Article I settled all strife over the method of deliberation when it declared that the three orders, the distinction of which was positively established, might deliberate in common, but under two conditions, that the orders agree and that the king approve. The second article removed all difficulty relative to the verification of credentials. After statements as precise as these, there was no occasion for discussion upon the deliberation of June 19, which concerned the verification of credentials in common. The king had declared against it and it was inconceivable that the nobility should consent to that form in face of the king's decision. Besides, even if the terms of the declaration were not to be accepted, the necessary preliminary was to deliberate upon the document to see whether it would be executed. In short, two matters were before the assembly the morning of June 24, the deliberation of June 19 and the declaration of the king. The latter rendered the former without object; hence, it was reasonable to begin the session by considering the declaration.

Brief attention was given to the further fact that some members raised the question whether the examination of the declaration should not occur in a general assembly of the three orders. The *Récit* maintained that this would have been contrary to the intentions of the king, who had ordered separate meetings

and who had despatched copies of the declaration to each chamber. Finally, it was contrary to the declaration itself, to deliberate upon its acceptance in a form which it repudiated.

From all these arguments, the *Récit* concluded that the decree of June 19 was still valid and formed the law according to which the clergy should verify its credentials and continue its sessions, despite the voluntary absence of some of its members. The chamber approved this justification of its own conduct and ordered the secretary to have the document printed, while the original was to be preserved with those of the *procès-verbaux* in the archives of the clergy. Coster adds that it, as well as printed copies of all the other acts of the clergy, were to be distributed in all the provinces.[14]

On the face of things, it appears glaringly inconsistent that, after passing a decree to join the other orders and as their last act before carrying that decree into effect, the clergy should have ratified a document of such tenor. In reality, however, their union with the other orders was in complete harmony with the *Récit*, which fully admitted the binding force of the king's declaration. The king merely took the initiative in proposing a joint assembly of the estates on a certain date; the clergy exercised its privilege of consenting, but with full reservation of all its rights as guaranteed in the declaration. There was no intention of going to verify credentials, far less of accepting the revolutionary doctrine of vote by head with no distinction of orders. It was fully in harmony with the king's declaration, also, that the clergy should have made their action conditional upon similar action by the nobility.

But not until practically all their own unfinished business was completed did the clergy learn that the nobility was about to act favorably upon the king's request.[15] The word may have been brought by the Archbishop of Aix and the Abbé de Montesquiou, who had been sent to confer with the nobility. The clergy sent a delegation composed of eight members, of whom the Bishop of Uzès was chief, evidently to communicate to the nobility the decree of the clergy in regard to the matter

[14] Barmond, *Récit*, 282; Coster, *Récit*, 348.

[15] Barmond, *Récit*, 282.

of union. When it returned, the bishop is said to have borne the news that the nobility would go to the hall of the estates.[16]

XVII

This decision was the final outcome of a long and stormy session of the nobility, in which the debate was heated and the opposition obstinate. Presumably, the session opened before the return of the president from the chateau.[1] The minutes of the previous day were read and the debate was begun upon the refusal of the third estate to recognize the deputation of the day before, other than as "non-united nobles." This discussion, it will be recalled, had been postponed June 26 until the next morning. It promised to be very violent, but not much had been done when the president presented the king's letter, asking them to submit, in a sense, to the very thing against which they were protesting. The letter was practically the same as that sent to the clergy.[2] Whether the president

[16] Barmond, *Récit*, 282; *Procès-verbal . . . de la noblesse*, 301–302. The latter states that there were eight, but the *Récit* merely notes that it was composed *suivant l'usage*. The *Procès* indicates that their deliberation was interrupted by the deputation, which came before the receipt, by the nobility, of the letter from the Comte d'Artois, and which withdrew immediately after reading the clergy's decree. The *Récit*, however, states that the Bishop of Uzès brought the news that the nobles would obey the king and awaited the clergy. He may have inferred from what he heard that the nobility would yield, but their own record indicates further action after the clerical deputation left the chamber.

[1] *Procès-verbal . . . de la noblesse*, 300; Gauville, 8. The usual hour of opening was nine o'clock. If the Cardinal de la Rochefoucauld did not return until half past nine, probably the Duke of Luxemburg did not return earlier. The fact that the chamber began to discuss the action to be taken upon the third estate's response of the previous day, would indicate that the duke was absent or the letter would have been presented immediately on the opening of the session. Gauville implies that the nobility was in session before the duke's return.

[2] *Procès-verbal . . . de la noblesse*, 300; Barmond, *Récit*, 277–278. Comparison of the texts shows that they are practically identical except for the substitution of *ma fidele noblesse* for *mon clergé*. Texts of the letter are given in *Etats-généraux*, *Extrait du journal de Paris*, I, 123 (last two sentences omitted); Boullé, *Docs. inédits*, *Revue de la rév.*, XIV, 28; *Letter of a deputy from Paris, le 27, à minuit*, appendix; Duquesnoy, II, 139–140 (part omitted). The following refer to the letter: Dorset, I, 226; Jallet, 107; Biauzat, II,

made full explanation of the circumstances under which he received the letter is not known. The *procès-verbal* of the chamber states merely that, before reading the letter, the president announced that both he and the vice-president had been summoned by the king.[3] Baron de Gauville, one of the nobility, indicates that the chamber knew of the president's visit to the king. He states that the excitement felt in the chamber, while the president was with the king, changed into humiliation when it learned that the king had abandoned his nobles.[4] If the letter produced this effect upon very many, the ensuing discussion must have been very lively.[5] There seems to have been a great difference of opinion over the means best fitted to serve the king. Some insisted upon the closest adhesion to the principles already laid down in the decrees passed by the chamber; others were of the opinion that the circumstances demanded, if not the sacrifice of principles, at least the sacrifice of resistance; many felt that in obeying the king by uniting with the other two orders, they would best serve him, by bearing into the common hall of the estates-general the unvarying attachment of the nobility for the constitutional laws of the monarchy.[6]

A few specific details of the debate are found in the account by the *Deux amis de la liberté*, but there is no indication as to the source of this information. It claims that sixty-five members, inspired by the reactionary D'Eprémesnil, wished to protest against the will of the majority. The Vicomte de Mirabeau went even further when he swore never to leave the chamber, but no one followed his example. The Duc de Liancourt and other patriotic members made stirring speeches in favor of acceptance.[7]

146; Bailli de Virieu, 104; *Mercure de France: Journal Politique de Bruxelles*, No. 27, 50.

[3] *Procès-verbal . . . de la noblesse*, 300.

[4] Gauville, 8.

[5] *Procès-verbal . . . de la noblesse*, 300–301; *Histoire de la rév.*, I, 239–240; Boullé, *Documents inédits*, *Revue de la rév.*, XIV, 28; Dorset, I, 226; Jallet, 107; Barentin, 247; Coster, *Récit*, 345.

[6] *Procès-verbal . . . de la noblesse*, 300–301.

[7] *Histoire de la rév.*, I, 239; Boullé, *Docs. inédits*, *Revue de la rév.*, XIV, 28; Moleville, I, 247. Boullé had heard " qu'elle [the letter] y donnait lieu à de

Evidently to reduce the chaotic discussion to order, opinions of the various deputies upon a series of motions were called for. The nobles were engaged in this task, which was nearing completion, when the deputation came, bringing the decree of the clergy. The reading of the measure by the Bishop of Uzès apparently did not hasten the decision of the nobility. As soon as the clergy retired, they resumed the roll-call by which the members were stating their opinions on the various motions, "when," to follow the proces-verbal, "a new invitation more urgent and decisive still permitted the order of the nobility to heed only its feelings and the fears of its heart for the king; the entire order without further deliberation resolved to yield to the wishes of His Majesty."[8]

The "new invitation" was a brief note from the Comte d'Artois, urging the nobility, because of his personal regard for them, to yield at once to the king's request, and not to imperil his life and the welfare of the state by longer hesitation.[9]

grands débats et qu'il était question chez un assez grand nombre, d'une protestation, mais que cinquante membres, au moins, refusaient de la souscrire et allaient se rendre dans la salle." Moleville says more than eighty persisted in remaining in their chamber.

[8] *Procès-verbal . . . de la noblesse*, 303.

[9] Coster, *Récit*, 345–346; *Letter of a deputy, Paris, le 27, à minuit*, appendix; Duquesnoy, I, 140; Barentin, 249; Letter by Comte d'Artois in 1799 explaining why he wrote letter of June 27, given in Barentin, 282–284; Jefferson, II, 488; Dorset, I, 226; *Correspondance d'un député . . . avec la Marquise de Crequy, Revue de la rév.*, II, 38; *Histoire de la rév.*, I, 240; Moleville, I, 247. The first two sources give what purports to be the text of the letter of the Comte d'Artois, but they vary somewhat. The *Histoire* states that the Duke of Luxemburg read to the chamber fragments of a letter which he had received from the Comte d'Artois. Jefferson heard that notes which may not have been the same in content were written to several members. These statements may explain the variations in the available texts. Coster, who as a member of the clergy might have had a better opportunity to secure a copy of the letter, than the writer of the letter from Paris, who was a member of the third estate, gives this version: "Vous connaissez, Messrs. tout mon attachement à la noblesse; je connais tout celui qu'elle a pour moi. Je vous conjure de vous réunir au tiers-état pour sauver le roi et l'état." The other text is as follows: "Si mon nom a encore quelque ascendant dans votre chambre, je vous prie aujourd'hui et sans délai d'opérer votre réunion à l'assemblée nationale; le sort de l'état et le bonheur de mon frère en dépendent."

The fact that the clergy made their action dependent upon the action of the nobility, the prolonged debate in the chamber of the latter and the obstinacy of the nobles in holding to every point of their rights, seemed about to defeat the king's attempt to force a union of the estates. The apprehension of the court must have increased with every moment of delay.[10] The middle of the afternoon had come without any sign of the nobility's compliance with the king's desire. Barentin charges that this was the situation of which Necker took advantage to play upon the king's fears until Louis XVI ordered the Comte d'Artois, who enjoyed marked popularity among the nobles, to write the letter of admonition to the reluctant order. The rôle played by Necker is very questionable, but that both the king and the Comte d'Artois regarded the latter's step as highly necessary is shown by a letter written by the Comte d'Artois to Barentin in 1799, apropos of this very matter. After a lapse of ten years he said: "If a feeling, independent of my own opinion, could have influenced the determination which I had taken, it could only be attributed to the positive knowledge which I had that the king considered this measure as an absolute duty on my part."[11]

Whether the Comte d'Artois wrote but a single note addressed to the Duke of Luxemburg, his intimate friend, or whether he sent notes to several of the nobles is not clear from the available evidence upon the matter.[12] All the summaries of its

These two texts vary so greatly in language and content that they cannot have come from a common source.

[10] Boullé, *Documents inédits, Revue de la rév.*, XIV, 29; Dorset, 226; Barentin, 249.

[11] Barentin, 282–284.

[12] *Histoire de la rév.*, I, 240; Moleville, I, 247; Jefferson, II, 488. The first states that the letter came to the Duke of Luxemburg, who would be the natural person to receive it. Moleville says: "Au milieu de ces débats, on vit le marquis de la Queuille, lire avec émotion une lettre qu'on venait lui remettre, et s'en entretenir d'un ton très-animé avec les secrétaires; elle était de M. le comte d'Artois . . . ." Jefferson had heard that "there was a considerable opposition; when notes written by the Count d'Artois to sundry members, and handed about among the rest, decided the matter." The majority of the accounts which mention the intervention of the Comte d'Artois imply that he wrote just one note.

contents, as well as the reputed copies of the letter, indicate that it was very brief, but despite its brevity, it served to break the opposition, although not to overcome it. The Comte de Saint-Simon is said to have exclaimed impulsively, putting his hand on his sword: "The king is in danger, gentlemen; let us go to the chateau, our place is with the king."[13] M. de Cazalez cried out something to the effect that if the monarch was endangered, so also was the monarchy, that it was necessary to save it first, and that the separation of orders was its sole support. The indications are that the debate was about to break out again when the Duke of Luxemburg took things into his own hands, saying in effect: "It is not a question of deliberating, gentlemen, but of saving the king; his person seems to be in danger; who of us could hesitate for an instant?"[14] At this turn in affairs, the Vicomte de Mirabeau was much embarrassed by the oath he had taken. With the chamber's consent, the president is said to have freed him from his rash vow, that he might accompany the rest of the order.[15]

In spite of their decision to yield to the king's will, members bound by imperative mandates began to submit reservations, just as they had done on June 25 when the chamber voted to accept the first declaration of the king. It is claimed that for almost two hours those in favor of obeying the king's letter worked to induce their opponents to renounce their intention of loading down the record with their protests, but all to no purpose.[16] Only seventeen of these protests came in on June 27, but sixty others of like tenor, defining the position of their authors in the matter of a single assembly and vote by head, followed on June 30, and the first days of July.[17]

[13] Moleville, I, 248.

[14] *Ibid.*, I, 248; *Histoire de la rév.*, I, 240. The two versions vary somewhat, indicating their probable independence.

[15] *Histoire de la rév.*, I, 240.

[16] *Histoire de la rév.*, 239–240.

[17] *Procès-verbal . . . de la noblesse*, 304–349. All are fully analyzed in "The Counter Revolution of June–July, 1789: Rôle of the Assembly from June 30 to July 11," by E. L. Howie, *Univ. Studies of the University of Nebraska*, July–October, 1915.

Of the seventeen which were submitted on July 27,[18] five came from two bailliages in Franche-Comté, three of them being made by a group of alternates from Amont, and two by Grosbois, representative from Besançon.[19] Matters of special interest to Franche-Comté were presented in two of them.[20] These mandates enjoined their bearers to register certain protests with the assembly. This action had been deferred, first, because the organization of the order had not been completed, and then, later, because of the importance of the work before the chamber. Evidently, they feared that the chamber was about to lose its identity in the general assembly, so hastened to fulfil the will of their constituents. Their first complaint was that the estates of their province had the right to elect their representatives. Apparently, their own selection had not occurred in that manner. Grosbois from Besançon protested against the insufficiency of the number of deputies from his district in view of its extent and population. The others protested against double representation for the third estate as an infraction of ancient law. They asserted that this change could not prejudice the rights of each of the three orders in the estates general or serve as an example, custom, or law.[21]

Two other declarations came from the *sénéchaussée* of Riom, one signed by four of the five members, the other by all.[22] The Marquis de la Fayette was the fifth signer. Despite his professedly liberal sympathies, and his desire to join the national assembly, he was restrained by imperative mandates. He had not joined in protests made by the other nobles from his district, but did sign the statement explaining that, although they had tried to execute the desires of their constituents, they yielded to the decision of the plurality of their order, an action in harmony with their constituents' will.[23]

[18] *Procès-verbal . . . de la noblesse*, 304–315. The protests will be designated by number.

[19] Nos. 1, 3, 4, 7, 11.

[20] Nos. 1, 11.

[21] Nos. 1, 11.

[22] Nos. 9, 13.

[23] Jefferson, II, 486. In speaking of the union of the minority of the clergy, June 25, Jefferson wrote: "The Marquis de LaFayette could not be

In all, twenty-six different names appeared among the signatures, of which all but five had protested on June 25. The reason for the declarations was practically the same as on that day. They were bound by imperative mandates, sometimes by oaths as well, to vote only by order and never by head.[24] In the one case only, a plurality of the order might oblige the group to vote by order, but they would yield only in protesting that vote by order was the will of their constituents.[25] One representative declared, as he had done June 25, that his credentials were annulled in advance if he acted out of harmony with his instructions.[26] Another repeated that not only must he vote by order, but no two orders could bind a third.[27] Others justified themselves by saying that they had always tried to make vote by order prevail.

Although some protested against the decree of June 27 or refused to recognize it at all,[28] nevertheless all agreed to go to the general hall. In some instances, respect for their order dictated this step,[29] but, in one case, it was specifically stated that such action was not intended to contravene in anyway the instructions of constituents.[30] Other reasons for union were the dangers to ruler and state,[31] the urgency of the king's invitation,[32] or the desire to prevent a schism in the order.[33]

In explaining their course in the impending general assembly, many declared that they could take no part in the deliberations that might occur.[34] In two cases, deputies explained that they would stay with the assembly to save themselves from possible

of the number, being restrained by his instructions. He is writing to his constituents to change his instructions or to accept his resignation."

[24] Nos. 2, 3, 4, 5, 8, 9, 10, 12, 13, 14, 16.

[25] No. 9.

[26] No. 8.

[27] No. 14.

[28] Nos. 2, 3. 4, 10.

[29] Nos. 3, 4, 5.

[30] No. 3.

[31] Nos. 2, 16.

[32] Nos. 16, 17.

[33] No. 2.

[34] Nos. 3, 4, 5, 6, 7. 8, 12, 14, 15, 16, 17.

reproach by the king or their constituents.[35] Although sitting in the assembly, some would protest against anything contrary to the wish of their constituents and to their oath.[36] Others would even nullify everything done in the estates until their new credentials came.[37] Still others reserved the right to protest whenever necessary for the preservation of the rights of the orders and the principles of the French monarchy.[38] Some were bound explicitly to protest against all deliberation by head. Two stated their intention to protest against all acts contrary to the principles of the decree passed by the nobility on May 28. This measure stated that deliberation by order was one of the fundamental principles of the monarchy.[39]

In most cases, relief was expected when their constituents learned the situation. In general, however, it is clear that a very large proportion of the nobility, far from accepting the policy of the third estate, was averse to supporting the idea of action in common, even in the degree outlined in the king's declaration. Under the circumstances, however, it was very doubtful whether the nobility could escape the consequences of the step which they were about to take in conjunction with the clergy.

XVIII

The session of the commons on June 27 opened without any indication that it was to mark a turning point in the career of the assembly. Apparently, not until almost noon did they learn of the king's letter to the upper orders and of the subsequent debate among the nobility, which was not to be terminated until the late afternoon.

As on the previous days, so on the morning of June 27, the defections from the upper orders continued. Three more deputies deserted the minority of the clergy and came to join the national assembly, making eighteen in all, since the accession

[35] Nos. 6, 15.
[36] Nos. 2, 9, 10.
[37] No 9.
[38] Nos. 2, 3, 4, 7, 9, 10, 14.
[39] Nos. 9, 14.

of the majority on June 24. At the opening of the session,[1] La Roche-Negly, prior of Saint-Honoré of Blois, and M. Chabault, *curé* of the parish of Saint-Victor, both deputies of the *bailliage* of Blois, submitted their credentials and took their places among the clergy. M. Veytard, *curé* de Saint-Gervais and deputy from the city of Paris, was the third clerical representative to join and pass in his credentials.[2]

Besides these clergy, two nobles cast in their lot with the minority of their order. The Count of Pardieu, deputy from the *bailliage* of Saint-Quentin, who had submitted a declaration to the chamber of the nobility, June 25, had made a flying trip, covering the distance to Quentin and back within three days, that he might have the approval of his constituency through new instructions for the step that he desired to take.[3] In a speech to the assembly, he stated that despite the dictates of his conscience, which urged union, he never would have taken the step had he not secured the permission of his constituents. He expressed his delight at witnessing the partial union of the national representatives, but continued: "It is with the most lively joy that I reflect that soon all the orders, animated by the same desire and united by the same sentiments, will hold only the same view. It is this time that every patriotic citizen awaits with the greatest impatience, as the sole means of giving the king the most tender marks of our love and of paying to the nation the tribute which it has the right to expect from us."[4] The Marquis de Bourran, deputy of Agen, who accompanied

[1] *Procès-verbal*, No. 9, I; *Point du jour*, I, 61. Both note that the session opened at ten o'clock, an hour later than usual.

[2] *Procès-verbal*, No. 9, 1.

[3] *Ibid.*; *Point du jour*, I, 61; *Assemblée nationale*, I, 255–256, says: "Trois gentilshommes se sont présentés." There were three clergy, but only two nobles. This account does not mention any clergy. Duquesnoy, I, 14; *Courrier de Provence*, *Lettre XIV*, 4. Both of these tell of the Count of Pardieu's flying trip to secure new instructions. *Procès-verbal . . . de la noblesse*, 271; *Etats-généraux*, *Extrait du journal de Paris*, I, 121; Boullé, *Docs. inédits*, *Revue de la rév.*, *XIV*, 27. Boullé says: "Deux gentilshommes et deux ecclésiastiques."

[4] *Procès-verbal*, No. 9, 2–3.

the count, submitted his credentials without explanation and seated himself with the other nobles.[5]

The assembly then proceeded immediately to the task of reading minutes, those of June 23 to June 26 inclusive being communicated to the deputies.[6] If uninteresting, such work was very necessary, "since sometimes, in spite of the scrupulous care of the officials, errors slip in." But occasionally, it was needful to decide just what was to be inserted, and an example of this was to be given on this day as on June 24. It seems that Pison du Galland, the second secretary, had inserted in the minutes, the document left the day before by the deputation from the nobility. Camus, the first secretary, objected to this proceeding and appealed to the assembly to justify his contention that it be withdrawn. If the assembly indicated that it recognized the extract, then it must protest against the false, anti-constitutional principles contained therein and place this protest after the entry of the act in the minutes. Then he went on to show that, after the decree of persistency June 23, it was wholly unnecessary to make protests; hence the document from the nobility should not be inserted at all. His objection and explanation led to a discussion. Those in favor of his ideas held some such view as this, that such an article, contrary to the organization of the assembly, impairing its rights and committing an offense against the principles of the monarchy, should not remain on the records unless the records showed also the feelings of disapproval which it had inspired among the deputies.[7]

[5] *Ibid.*, No. 9, 1–2; Duquesnoy, I, 140; *Point du jour*, I, 61; *Courrier de Provence, Lettre XIV*, 4; Boullé, *Documents inédits, Revue de la rev.*, 14, 29. The latter states that when news of the king's letter to the nobility came, these two nobles asked that their credentials be verified immediately that it might be said that they united freely and of their own will. Their request was granted. Evidently the same thing is referred to in the *Etats-généraux, Extrait du Journal de Paris*, I, 125. It says, referring to the news of the impending union: "Dans le même instant deux députés de la noblesse et deux députés du clergé, déjà présents, mais nouvellement arrivés, se sont empressés à demander acte de la présentation de leurs pouvoirs."

[6] *Procès-verbal*, No. 9, 3; *Point du jour*, I, 61; Boullé, *Docs. inédits, Revue de la rév.*, XIV, 27. Boullé refers to the reading of the *procès-verbal de la veille.*

[7] *Assemblée nationale*, I, 256. This paper gives a full account of this incident, showing how it occurred and naming some of the participants in

The opposition replied by discussing the nature of a record. It was held to be merely a simple account of all the acts of an assembly. Consequently, the deliberation of the majority of the nobility could be inserted without any danger. Since no protest had been made at the time, such action could not be taken later. As they had referred to the electoral deputation from Paris and inserted its discourse, so they could, without any baneful results, do the same for the deputation from the nobility.[8]

Another view was for the entry of the protests without the extract.[9] Thus there would be eliminated the eulogies of the nobles at the king's innovation in saying "I will, I order," instead of the customary "we will, we order," expressions, which existed, fortunately, only in words. Bailly, it seems, offered another solution, that of inserting the response made to the nobles, but even that was strongly opposed and the matter went to a vote. The decision was for the simple insertion of the nobles' act, a settlement that was reached almost without opposition.[10] Apparently, the majority felt strongly enough the fact that they did not recognize any other legislative body, without stating that this was their attitude.

As soon as this matter had been disposed of, the work relating to the committees was taken up. The Archbishop of Vienne announced, it is said, that several clergy asked that an ecclesiastic from each *généralité* be chosen to act in the committees formed by *généralités* and the assembly granted the request.[11]

the debate. *Point du jour*, I, 61; Duquesnoy, I, 141. These two show that there had been some discussion over inserting the act of the nobility, but do not trace the course of the debate.

[8] *Assemblée nationale*, I, 257; Duquesnoy, I, 141.

[9] *Assemblée nationale*, I, 258. The name of this deputy is given as M. Dangevillier. There is no such name in the list of deputies given by Brette. The names most resembling this are Dangereux, of Pondichèry, and Angerville-Lorcher (*curé* d').

[10] *Assemblée nationale*, I, 258; Duquesnoy, I, 141; *Point du jour*, I, 61. Only the first suggests that Bailly took the part ascribed to him.

[11] *Assemblée nationale*, I, 258. The committees formed by *généralités* were those of verification and food supplies. (*Procès-verbal*, No. 2, 3–4.) According to this change, thirty-two of the clergy instead of ten, chosen June 25 to enter the committee on food supplies, would now serve and the same number,

Bailly presented a memorial from the inhabitants of Versailles who wished to be represented by a direct deputation to the States-general and this matter was referred to the committee of verification.[12]

The report of that committee was given as usual. Bluget announced that the credentials of seven nobles and clergy were in proper form, and they were recognized as members. The Bishop of Autun, however, had failed to produce the true act of election and was admitted only provisionally. Bluget also reported on the credentials of La Roche-Negly and Chabault, who had just entered, and one of the secretaries had proceeded to an immediate examination of those of Veytard and of the Count of Pardieu. These four had the necessary papers and were admitted. The Marquis de Bourran lacked the true document of election, but was given a provisional seat.[13]

The chief task of the committee was the report of Prieur of its investigation and decision relative to the San Domingo deputation.[14] In its broadest aspect, this request of the San Domingans for representation threatened to open the whole question of French colonial policy. The old paternal system of control, which recognized dependencies merely as instruments of commercial advantage to the mother land, was brought face to face with the new conception founded on the idea of natural rights, that colonies should participate in all the legislative activities of the motherland. Recent events in America must have had their influence on this situation and the indications were that there was no desire to discuss the question as applying to all French colonies, but rather the intention to confine the debate to the case in hand, *i. e.*, whether there was sufficient reason to justify the assembly in admitting San Domingo.

The situation was presented first from the historical standpoint,

instead of sixteen, as on June 22, would assist in the work of verification. No other account indicates that such a change was ordered, although the *Procès-verbal* usually notes carefully any change in the organization of committees.

[12] *Point du jour*, I, 61; *Assemblée nationale*, I, 259.

[13] *Procès-verbal*, No. 9, 3–4; *Assemblée nationale*, I, 259.

[14] *Procès-verbal*, No. 9, 3–4; *Assemblée nationale*, I, 259; *Point du jour*, I, 61; Biauzat, II, 146; Jalet, 107; Boullé, *Docs. inedits*, *Revué de la rév.*, XIV, 28; *Etats-généraux*, *Extrait du journal de Paris*, I, 123–125.

then in the light of the interpretation of the principles contained in the orders of convocation, and finally the committee gave an outline of the difficulties disclosed by the request, upon which the assembly was to pass. The beginning of the colony was traced back to the seventeenth century, to the time when the brave filibusterers who had established it gave their allegiance to Louis XIV, while they retained the right to tax themselves. In 1713, the colonists granted financial aid to France, but without impairing in any way their right of self-taxation and of apportioning the sums so raised. Gradually the amounts turned over to the mother country increased from 6,000 livres in 1737 to 60,000,000 fifty years later. Then Prieur, the reporter, showed that all the advantages of the colony and, consequently, the benefit to France would be greatly augmented if the estates should succeed in granting a good constitution to the colony, one freeing it from the oppressive régime which bound its industry and carried discouragement to the minds of the colonists.

So far the reporter had viewed the question from the standpoint of commercial advantage to France. Now he looked at it from the side of the inherent rights of the colonists. The order of convocation in the decree of October, 1788, guaranteed the assembly of the estates-general to all the peoples of French dominion. Hence, the fact that this colony had been forgotten, unintentionally or purposely, in the letter of convocation did not impair its natural right to participate in the assembly.[15]

Prieur concluded the report by giving the statement of the committee's analysis of the matter. The opinion was that there were three important questions involved, upon which the assembly must make the final decision. The first consideration was whether representatives of the colony should be admitted at all; the second touched the legality of their elections and the validity of their credentials; the third point was the number

[15] *Point du jour*, I, 61–62; *Moniteur*, I, 104. Although the *Moniteur* is merely a compilation, at this point it has been drawn from some source or sources other than the ones accessible to me. Only the *Point du jour* gives any detailed account of the committee report. Although the *Moniteur* uses the *Point du jour*, it has much more information regarding the affair of San Domingo than is found in the *Point du jour*.

of deputies to be granted seats.[16] In the first case, the committee was unanimously in favor of an admission which was dictated by natural rights as well as by a sane policy. The line of argument was that the colonial planters were French, they were taxed by France, and, as national soldiers, helped to defend France. If they had been united with France, either by conquest or by treaty, they would have been given representation in the assembly of the nation of which they were a part. Then the pertinent inquiry was made whether voluntary submission should make their lot more rigorous and their rights less respectable.[17]

As to the second question, a thorough examination left no doubt in regard to the legitimacy of both election and credentials.[18] The third point, however, caused difficulty, because there was no suitable basis upon which to found a decision as to the number. The continental provinces could not be used as a basis for comparison. As the colony had only 40,000 free inhabitants and ten or eleven times as many blacks, population could not be used because, in that event, the colony would have a very ordinary representation which would be a manifest injustice. In the judgment of the committee, the matter should be taken up from the standpoint of the importance of the colony, its extended coast line, its wealthy planters, its immense commerce of 600,000,000 livres annually, requiring five hundred vessels and twenty thousand sailors to move it, its great tax.

[16] *Procès-verbal*, No. 9, 5, says: "M. le rapporteur a observé que la question se réduisait à deux points principaux; savoir, si l'assemblée recevrait des députés de la colonie de St. Domingue, et en quel nombre elle les recevrait." The *Point du jour*, I, 62, names the three questions, as does also the *Assemblée nationale*, I, 259–60, but in different language. *Courrier de Provence, Lettre XIV*, 5–6, gives three points in the same language as those found in the *Point du jour*. *Etats-généraux, Extrait du journal de Paris*, I, 124; *Mercure de France: Journal Politique de Bruxelles*, No. 27, 52.

[17] *Point du jour*, I, 62–63; *Procès-verbal*, No. 9, 6; *Moniteur*, I, 104.

[18] *Point du jour*, I, 63; *Assemblée nationale*, I, 260, says: "Lesecond n'a pas été absoluement approuvé;" *Moniteur*, I, 104, gives this: "Sur la seconde question, il annoncé que le comité a jugé les pouvoirs sufficants, et que la nomination des députés est valable quoique le réglément de convocation n'ait pas été strictement observé."

Dauphiné supplied only 500,000 livres, yet it had twenty-four deputies.[19]

On the first two points, the committee readily came to a favorable agreement, but there had been a division over the number to be admitted. Thirty-seven had been elected originally, but only twenty were then asking to be received.[20] One half of the committee voted to seat the entire delegation. The other half would admit but twelve—and those only for the session then ensuing—but would recognize the remaining eight as alternates.[21] The report of the committee was referred to the whole assembly for definitive action.

In the debate that followed, the general sentiment was that justice and expediency dictated the granting of a place in the national legislature to San Domingo, although the ways and means proposed to effect that result differed. Despite the fact that the Marquis of Sillery had only a consultative voice and by his own statement was not very well informed about the colony, he opened the discussion in announcing that he could not see any conceivable reason for debarring this important dependency from participation in the states general. And, evidently as the most cogent reason in his opinion, he added that the recent American revolution should prove a sufficient warning to France of the necessity of such a step.[22]

The next speaker of whom there is mention, Delaville Le Roulx, favored the admission of the deputation, but held that the authorization of the king was necessary before the assembly could legally make such a decision.[23] This objection, however, seems to have been met by the counter contention that all

[19] *Point du jour*, I, 63; *Moniteur*, I, 104. The first gives the fuller account.

[20] *Assemblée nationale*, I, 260; *Moniteur*, I, 104; Jallet, 107; *Etats-généraux, Extrait du journal de Paris*, I, 124; Boullé, *Docs. inédits, Revue de la rév.*, XIV, 28.

[21] *Point du jour*, I, 63; *Moniteur*, I, 104; *Assemblée nationale*, I, 260.

[22] *Point du jour*, I, 63–64; *Moniteur*, I, 104. One account supplements the other.

[23] *Moniteur*, I, 104; *Assemblée nationale*, I, 260. No name is given in the letter, but the view is ascribed to several referred to as "Il y a eu des personnes."

matters relating to deputations had been submitted to the assembly itself.[24]

Bouche of Provence is reported to have presented a rapid sketch of San Domingan conditions, in which he made it appear that the prohibitory laws were unfavorable to high revenue. Then he proposed a scheme of reform which should place the colony on a much more just and prosperous basis.[25] For the term colony, he would substitute French-American isles or possessions and would convoke the inhabitants just the same as all other Frenchmen. The prohibitory laws should be reformed and the imposts verified, while the complaints against administrators should be examined.[26] Clermont-Tonnerree observed that his cahiers asked that colonies be treated as provinces. The only consideration, to his mind, was whether the advantages were greater under colonial or under provincial relations.[27] Target merely stated the views of his constituents as his own on the question of admitting the deputies.[28]

There is no indication that Mirabeau participated in the debate, which he characterized as "superficial, devoid of vitality and foreign to the real questions at issue." He did state his ideas on the matter in the following number of the *Courrier de Provence*. He considered that the question of admission had not been really discussed at all by the assembly. Rather, the affirmative of that point had been taken as self-evident. He refuted the assumption of such a view by showing that the colonies had never had representatives in the states general; consequently they could appear only by virtue of the king's convocation. In so far then, the deputies from San Domingo had violated established precedent by their demand for admission, in default of the royal sanction. Although he did not regard the illegality of their coming as a reason for refusal, still

[24] *Assemblée nationale*, I, 260.

[25] *Point du jour*, I, 64; *Moniteur*, I, 104. The first gives a very brief summary; the full report is in the second.

[26] *Point du jour*, I, 64. The proposals of Bouche are given only in this source.

[27] *Moniteur*, I, 104; Duquesnoy, I, 140. The first supplements the second.

[28] *Moniteur*, I, 104.

he insisted that the king's approval was necessary to any legislative act to admit them.[29]

This charge of lack of summons by the king had come up in the assembly it appears, but had been met by the production of a ministerial letter, which promised that San Domingo should have a deputation to the first session of the estates. If such were the case, then it was virtually called to the states general of 1789.[30]

In the midst of the discussion in the assembly, another question involved in the affair of San Domingo appeared. In connection with the matter of representation in a country where there was perhaps only one tenth as many whites as blacks, the question of negro slavery naturally arose, particularly when it was being agitated so strongly in England. This turn of the debate gave men who had instructions touching slavery an opportunity to present the views in their cahiers. Lanjuinais, Clermont-Tonnerre, Target, Biauzat, Baron d'Harambure and La Rochefoucauld, all disclosed such instructions. Lanjuinais asked that, in the case of San Domingo, slaves should not be counted since their masters could not represent them.

La Rochefoucauld is said to have made the request that the question of slavery should form a subject for the future consideration of the assembly.[31]

In the matter of determining how many representatives were to be admitted, there were various proposals, some favoring twenty, some twelve, and others ten. The Marquis of Sillery and Delaville Le Roulx wished to recognize the entire delegation as a means of binding the distant colony firmly to the motherland,[32] but Target, it seems, would make admission provisional.[33] Two members are recorded as having opposed so large a number. Bouche regarded ten as a just number in view of the preponderance of the black population over the white and of the com-

[29] *Courrier de Provence, Lettre XIV*, 5–6.

[30] *Assemblée nationale*, I, 261; *Moniteur*, I, 104.

[31] *Point du jour*, I, 64–65; Jallet, 107. The second merely notes that the question of African slavery arose. *Procès-verbal*, No. 9, 6 may refer to this.

[32] *Point du jour*, I, 65; *Moniteur*, I, 104. The first gives the opinion of the Marquis of Sillery; the second, that of Delaville Le Roulx.

[33] *Moniteur*, I, 104.

mercial importance of the colony. In the ratio of one to twenty thousand, San Domingo would be entitled to twenty-five if all her inhabitants were counted. If whites alone were considered, she would have but two. Under those circumstances, he deemed ten a just compromise.[34]

Lejeans opposed the admission of too large a number, because it would set a precedent which would mean two hundred colonial representatives when all French dependencies should demand the same consideration, as doubtless would be done. Garat, however, held that inequality should not preclude representation for the colony.[35] Apparently, just at this stage Gouy d'Arsy, from San Domingo, took occasion to explain that the large number elected was not due to any ambitious motives, but only to a desire to co-operate in the interests of the colony.[36] In his conception, no valid objection to the admission of twenty had been raised. He denied that such a number would result in two hundred colonial representatives. He contended that the population of San Domingo, its richness, its taxation, overbalanced the importance of all the other French colonies. If San Domingo were granted the number desired, representatives for all the possessions of France would not exceed forty.

Mirabeau took occasion to criticize in the *Courrier de Provence* the bases upon which San Domingo was to be accorded twenty deputies, just as he had reflected upon the admission of colonial representatives in itself. If slaves were to be counted as men, he wrote, then let them be enfranchised; if they were beasts, why should not France consider horses and mules in apportioning her representatives. On the other hand, he denied that there was any reason for emphasizing commercial importance, since it did not apply in continental provinces. If it was to be considered, then France would be under the necessity of giving her laborers an immense representation, and cities such as Nantes

[34] *Ibid.*

[35] *Moniteur*, I, 105. The name Legeand, given in the *Moniteur*, is not found in Brette. The name evidently should be Lejeans, deputy from Marseilles.

[36] *Point du jour*, I, 65; *Assemblée nationale*, I, 261–62. The latter gives the speech ascribed to the Marquis ot Gouy d'Arsy.

and Bordeaux would be justified in asking for a great increase, while there would be no occasion for non-commercial Paris to have forty deputies.[37]

In the final decision of the matter, the assembly gave a unanimous vote for the admission of representatives from San Domingo and approved the validity of their elections and credentials.[38] The question of the admission of ten or twenty was about to be put, when the assembly heard that the upper orders were on the point of joining the commons.[39]

[37] *Courrier de Provence, Lettre XIV*, 6–8.

[38] *Procès-verbal*, No. 9, 5; *Point du jour*, I, 65; *Assemblée nationale*, I, 262; Duquesnoy, I, 151; Jallet, 107.

[39] *Procès-verbal*, No. 9, 5, clearly states that they had been ready to vote on the second question: "On se disposait à aller aux voix sur le second point . . . lorsqu'il a été annoncé que ceux de MM. du clergé et de la noblesse non réunis, allaient se rendre dans l'assemblée; ce qui a suspendu la décision de ce second point." This indicates that the assembly learned that the orders were coming. Biauzat, II, 147, agrees with the *Procès-verbal* as to the cause of interruption, but says that the assembly learned of the king's letters, not that the orders were coming. *Assemblée nationale*, I, 262. This agrees that they were on the point of voting when it was learned that the upper orders were about to come. Jallet (107) does not indicate that it was for this reason that the meeting was postponed. He says: "Trois heures vinrent, le président déclara la séance toujours tenante, mais renvoya à cinq heures l'appel des votants sur le nombre des députés de Saint-Domingue qui seraient admis. Beaucoup de députés allerent dîner. La noblesse et le clergé mineur profiterent de ce moment et se rendirent a la salle." *Point du jour*, I, 65. This account does not say that the assembly postponed the vote until the following Tuesday because it had learned of the coming of the upper orders. After having stated that it was carried over to a later session, Barere adds: "Pendant que l'on agitait ces questions intéressantes de droit public, le roi écrivait en ces termes à . . . la minorité du clergé et la *majorité* de la noblesse." There is another idea of what was being done in the assembly in the *Courrier de Provence* (*Lettre XIV*, 9). Mirabeau indicates that the assembly had not settled the point of how many deputies were to be admitted and continues: "On allait s'occuper d'une adresse aux commettans; la motion en allait être faite, et le projet soumis à l'assemblée, lorsqu'on a appris que le roi avait écrit dans la matinée à M. le Cardinal de La Rochefoucauld." Later, he gives the speech that was to be delivered in support of the motion and the address itself. The *Moniteur* (I, 105), in compiling the account, ascribes the following speech to Mirabeau: "On vous a annoncé que le roi venait d'écrire à la majorité de la noblesse et à la minorité du clergé non réunis pour les inviter à se rendre enfin dans le sein de l'assemblée nationale. C'est sur

Just when the news came is not certain, but evidently some little time elapsed before the upper orders appeared. Boullé, one of the third estate, states that it was about a quarter of twelve when they learned that the king had sent to the nobility a letter prescribing union and that it was causing great debates in the chamber. Evidently the news stopped their discussion of the question of San Domingo, upon which he says they were engaged. Presumably, the entire assembly was informed of the situation. Boullé adds that it was this knowledge which caused the Count of Pardieu and the Marquis of Bourran to ask for the immediate verification of their credentials, that they might be able to say they had come to the assembly of their own free will. Boullé continues that not until half past one did the commons hear that the clergy also had received a letter from the king.[40] This knowledge might have made them believe that the union of the orders was about to take place, but it seems reasonable to presume that this news did not come for some little time yet, probably not until well toward three o'clock, about the time that the clergy heard the nobility would yield.[41] Still

cette circonstance que je demande la parole." Then follows the text of the speech as given in the *Courrier de Provence* and at the close is this sentence: "Voici le projet d'adresse que je présente." The address follows and it has this at the end: "On demande de tout parts l'impression de ce projet d'adresse." Boullé, *Documents inédits*, *Revue de la révolution*, XIV, 28–29; *Etats-généraux*, *Extrait du journal de Paris*, I, 124. Both the latter state that they were discussing the third proposition, but neither says explicitly that the first and second had been decided. The *Journal de Paris* says that the news of the prospective union of the clergy stopped everything: "on s'est levé; on s'est mêlé pour s'entretenir de cette grande nouvelle." *Mercure de France: Journal Politique de Bruxelles*, No. 27, 52. The latter states that the first two questions had passed.

[40] Boulle, *Documents inédits*, *Revue de la rév.*, XIV, 28; *Etats-généraux*, *Extrait du journal de Paris*, I, 125. This source states: "Deux députés de la noblesse et deux députés du clergé déjà présens, mais nouvellement arrivés se sont empressés à demander acte de la présentation de leurs pouvoirs."

[41] Jallet states that a recess of the national assembly began at 3 o'clock. No other source gives the hour at which the recess began, but practically all state that the assembly was taking a recess when the upper orders arrived. The *Journal de Paris* and Jallet state explicitly that the session was suspended until five o'clock. The upper orders came probably between four and five. The *Procès-verbal*, Boullé, and the *Journal de Paris* agree on four o'clock.

they did not come.[42] Boullé supplies an explanation which has elements of plausibility in it. He states that Bailly had received warning that the clergy and nobles planned to defer their union until five o'clock in the hope of finding a moment when the session was suspended. On this pretext, they could postpone their union until Tuesday and so gain two days of grace, during which some change perhaps might yet occur. On the other hand, the stubborn resistance of the nobility and their ungracious yielding even to the request of the Comte d'Artois would seem sufficient explanation of the long delay. Boullé, however, maintains further that the intention of the upper orders to catch the third estate off guard was what made Bailly suspend the session, but not adjourn it. He is said to have remarked that although the noble deputies and the separate ecclesiastics might not come before evening the most of the members of the assembly might go to secure some necessary refreshments, but the session would remain open nevertheless.[43]

XIX

Whatever the reason, the assembly decided upon some sort of recess in the latter part of the afternoon, Jallet says from three to five o'clock,[1] and it was during this period that the upper

The *Courrier de Provence*, *Point du jour*, and *Assemblée nationale* state that it was five, or nearly that. Jallet implies that it was during the recess. If the upper orders came at four, or shortly thereafter, the assembly must have had warning of the prospective union not later than three o'clock, especially if so long a delay followed that the national assembly felt called upon to suspend its sessions.

[42] *Etats-généraux*, *Extrait du journal de Paris*, I, 125; Boullé, *Docs. inédits*, *Revue de la rév.*, XIV, 28.

[43] Boullé, *Documents inédits*, *Revue de la rév.*, XIV, 29.

[1] Jallet, 107; *Assemblée nationale*, I, 262; "La séance a été continuée à 5 heures du soir;" *Point du jour* (I, 66) gives this: "L'assemblée nationale, dont la séance avait été prorogée jusqu'au soir;" Bailly (I, 250) says there was a recess, but does not indicate the time. Boullé, *Documents inédits*, *Revue de la rév.*, XIV, 29. *Etats-généraux*, *Extrait du journal de Paris*, I, 125. After stating the effect of the news that the upper orders were coming, the *Journal* adds: "La nouvelle s'est confirmée, mais on s'est assuré que la réunion ne se ferait pas dans l'instant même et l'assemblée nationale s'est ajournée à l'après-dinée pour cinq heures."

orders finally came. They advanced in two files toward the hall of the estates, the clergy, headed by the Cardinal de la Rochefoucauld at the right, and the nobility led by its president, at the left.[2] Very few members of the national assembly and not many spectators were left in the hall when they made their entrance some time between four and five o'clock.[3] Thus circumstances favored the discomfited conservatives. Most of the third estate had gone to lunch and even Bailly was not in the room. Only two secretaries at the desk and a handful of deputies testified to the fact that the assembly was still in session.[4] Consequently, their reception was a cool enough affair on both sides.[5] Bailly states that he was summoned in haste and hurried

[2] Coster, *Récit*, 346.

[3] *Procès-verbal* (no. 9) says: "À quatre heures;" *Point du jour* (I, 66), "Vers les cinq heures;" *Assemblée nationale* (I, 262) indicates five o'clock as the hour; Jallet (107) says that the recess was fixed for two hours, from three o'clock till five, and adds that the upper orders came during the interval. *Courrier de Provence* (*Lettre XIV*, 10) has "à 5 heures du soir." Biauzat and Duquesnoy do not say anything of the time. The account in the *Etats-généraux*, *Extrait du journal de Paris*, I, 125, says: "Il était environs quatre heures." The letter of the deputy written from *Paris, le 27, à miniut* says "cinq heures." *Histoire de la rév.* (I, 240) gives "Quatre heures et demi" as the time when the nobility was ready to go. Boullé says: "Quatre heures." Bailli de Virieu had heard that the clergy went at two o'clock, the nobility at four.

[4] Jallet (107) says: "Le président et les secrétaires étaient absents;" Bailly (I, 250) does not mention the secretaries, but says of himself: "Un nombre de députés sortit pour aller dîner. J'allai chez moi un moment; à peine y étais-je, qu'on vint me chercher en m'annoncant l'arrivée des députés des deux ordres." *Assemblée nationale* (I, 262) says: "M. Bailly était déjà dans la salle avec un petit nombre de députés." This man must have been misinformed in regard to Bailly's presence. *Point du jour* (I, 66) gives this: "L'assemblée nationale . . . était peu nombreuse dans ce moment-là." Jallet says that there were no more than fifty present. *Histoire de la rév.* (I, 241) says there were only twenty-seven to thirty and a very small number of spectators. Boullé, *Documents inédits*, *Revue de la rév.*, XIV, 29; Coster, *Récit*, 346. Coster states that two secretaries, one for the clergy, the other of the third estate, sat at the desk, but the presidents were gone. *Etats généraux*, *Extrait du journal de Paris*, I, 125; *Procès-verbal . . . de la noblesse*, 303.

[5] *Histoire de la révolution*, I, 241; *Point du jour*, I, 66; Biauzat, II, 147; Duquesnoy, I, 137; *Procès-verbal*, No. 9, 8. The first two assert that the

to the hall to take charge of the situation.[6] Evidently, the leader of the minority of the nobility appeared also, for Coster states that Bailly took the arm chair at the right of Clermont-Tonnerre while the one at the left remained vacant. He adds that doubtless the Archbishop of Vienne, leader of the ecclesiastical majority, was ashamed to debase himself to second place in the presence of all his order.[7]

Bailly rang for silence and says that he invited the leaders of the upper orders to speak, but they showed no inclination to do so, even refusing at first. Bailly's insistence, however, led them to make simple statements.[8] The Cardinal de la Rochefoucauld announced briefly and directly for the minority of the clergy: "Gentlemen, we were led here by our love and our respect for the king, our desire for peace and our zeal for the welfare of the public."

The Duke of Luxemburg followed with almost as short a statement: "Gentlemen, the order of the nobility decreed this morning to betake itself into the general hall in order to give to the King, marks of its respect, and to the nation, proofs of its patriotism."[9] Their speeches show clearly that they yielded only to the urgency of the situation. In neither case, was there the slightest hint of recognition of the national assembly and its policy.

Bailly responded in his most gracious manner, emphasizing strongly the joy felt at the union of the three orders, "Gentle-

reception of the upper orders was very cool. Perhaps these refer to the lack of demonstration because so few were in the hall when the other orders came. The cries and applause mentioned by the others may have been the later manifestations when the speeches were made by Bailly and the Duc d'Aiguillon. Bailly (I, 252) says of his own speech: "L'assemblée et les spectateurs témoignerent leur satisfaction par des applaudissements et par des cris répétés de vive le roi!"

[6] Bailly, I, 250.

[7] Coster, *Récit*, 346.

[8] Bailly, I, 250.

[9] *Procès-verbal*, No. 9, 6; Coster, *Récit*, 346; *Procès-verbal . . . de la noblesse*, 303; Boullé, *Documents inédits*, *Revue de la rév.*, XIV, 29; *Lettre of a deputy dated Paris, le 27, à minuit*; *Etats-généraux*, *Extrait du journal de Paris*, 125–126; *Histoire de la rév.*, I, 241; *Mercure de France: Journal Politique de Bruxelles*, No. 27, 51.

men," he declared, "the happiness of this day which brings together the three orders is such that the emotion which accompanies so keen a joy does not leave me the freedom of ideas necessary to respond worthily; but this very joy is a response. We did possess the order of the clergy; we have today the entire order of the nobility. This day will be celebrated in our calendar. It renders the family complete. It ends forever the divisions that have mutually afflicted us. It fulfils the desire of the king and the national assembly will occupy itself with the regeneration of the realm and the public welfare." No sooner had Bailly concluded his speech than the Duc d'Aiguillon, one of the nobles who had joined the assembly on June 25, seized the occasion to express the gratification felt by the minority of the nobility at the complete union of the orders.[10] In explanation of their action, he said: "In coming, two days ago, to unite with the national assembly, we believed that we were serving the country; we yielded to the irresistible impulse of our conscience, but a painful feeling was mixed with the satisfaction which we experienced in fulfilling our duty. Today however, he continued, "we see with transports of joy, the general reunion which was the desire of our hearts. The happiness of France will be the result of this unanimous accord and this day is the happiest of our lives."

Under such circumstances, the resumption of regular business by the assembly was out of the question. The session was adjourned until the following Tuesday, June 30. Bailly inter-

[10] Speeches of one or of both Bailly and the Duc d'Aiguillon are found in the following references: *Procès-verbal*, No. 9, 6–8; *Point du jour*, I, 66; Duquesnoy, I, 137; Biauzat, II, 147; Jallet, 107; *Procès-verbal . . . de la noblesse*, 303; *Histoire de la révolution*, I, 242; Boullé in *Documents inédits*, *Revue de la révolution*, XIV, 30; Coster, *Récit*, 347; *Etats-généraux*, *Extrait du journal de Paris*, I, 126; *Letter of a deputy from Paris*, *le 27*, *à minuit*. Coster's text of the speeches is exactly the same as that in the *Procès-verbal* of the national assembly. Probably he copied them from the printed *Procès*. The *Procès-verbal* of the nobility gives only Bailly's response. "Nous possedons aujourd'hui l'Ordre entier de la noblesse" in the *Procès* of the national assembly is changed to "l'Ordre de la Noblesse aujourd'hui se joint à nous" in the *Procès* of the nobility. It is interesting to note that the latter changes the text "l'assemblée nationale va s'occuper" to "l'assemblée nationale; ou plutot les États-généraux, vont s'occuper," etc.

preted, doubtless, the sentiments of the majority of the deputies when he declared that the day of the union of the three orders should be a time of rejoicing and gladness; that a moment so touching for them should not be employed in work.[11]

The news of the union produced the greatest excitement and enthusiasm among the people and Versailles went wild in celebrating the event. The deputies received an ovation as they scattered from the session[12] and they had hardly left the hall—so Biauzat states[13]—when the people rushed to the chateau in crowds, "as if in response to an instinct of love for their sovereigns." Frightened, very probably, by the great throngs, the guards stopped them at the outer gate, but the cries of *Vive le roi!* were so constantly repeated that they were permitted to enter the second court and even the third—the so-called court of marble. In response to the cries of the crowd, the king and queen came out on a balcony at the side of this court. Their appearance was the signal for prolonged shouts of *Vive le roi! Vive la reine!* until the queen was moved to tears by this demonstration of devotion, typical of the feelings of the whole nation for its rulers. Then, as if yielding to a single impulse, the great throngs renewed their shouts, calling for the little dauphin. The queen went to bring the young prince from his apartments in order to present him to his admiring subjects. This enthusiasm portraying the loyalty of the French to the king was enough

[11] *Histoire de la rév.*, I, 242; *Etats-généraux, Extrait du journal de Paris*, 126; Boullé, *Documents inédits, Revue de la rév.*, XIV, 30; Jallet, 108. Apropos of the adjournment, Bailly, (I, 252–253) gives the following incident: "J'étais alors debout devant le bureau. M. le cardinal de La Rochefoucauld se leva, et se trouva bientôt près de moi. J'entendis un membre du clergé qui lui dit: Monseigneur, il faudrait que vous levassiez la séance. Vous avez raison, reprit M. de La Rochefoucauld; et il se disposait à retourner à sa place pour l'annoncer. Je l'arrêt-toi: Monseigneur, vous ne pouvez pas lever la séance; vous n'êtes pas président. Mais il est tard; personne n'a dîné. Chacun est libre de se retirer individuellement. Mais, quant à l'assemblée, elle ne peut être rompue que par sa propre volonté; et c'est à son seul président, c'est à moi, de la consulter." Bailly says that the cardinal did not insist and that he himself, after having consulted several near the table, among them the secretaries and the Duke of Orleans, gave the order for adjournment.

[12] Coster, *Récit*, 347; Boullé, *Documents inédits, Revue de la rév.*, XIV, 30.

[13] Biauzat, II, 147.

to cause the editor of the *Point du jour* to reflect as to "how anyone could dare to slander, in the presence of the throne, a nation so sensible, so generous, and so idolatrous of its kings."[14] Yet it was generally rumored that such discredit was being cast upon the French people.

Next to the king, Necker was made the object of popular adoration. The common opinion of the people that he was the only one of the royal advisers who was working in the interests of the nation was sufficient to create the feeling that he was responsible for the union of the orders. As the crowd had gone to the chateau of the king, so it went to Necker's residence, repeating its testimonials of love and respect and "blessing him as the tutelary divinity of France."[15] Duquesnoy regarded the "benedictions of the people" as but a fitting recompense for Necker's services. "Today is for M. Necker the day of the grandest glory that any man ever acquired. It cannot be hidden that the plan is his work," he wrote. Then, as if in extenuation of his faults, he continued: "Perhaps he has not put into execution all the firmness, all the measures which circumstances seemed to render necessary; perhaps he has been too timid, perhaps he has not known men and the times well enough, but the essential thing is that he has succeeded, and that he has attained his aim without shedding a drop of blood." When a conservative could express such views, it is not to be wondered at that the people in general went wild over their idolized minsister, that crowds still stood before his house the next morning.[16]

[14] Boullé, *Documents inédits*, *Revue de la rév.*, XIV, 30–31; *Hist. de la rév.*, I, 243; *Etats-généraux*, *Extrait du journal de Paris*, I, 126–127; *Letter of a deputy from Paris, le 27, à minuit*; Jefferson, II, 488; Bailli de Virieu, 104–105; Biauzat, II, 147; *Assemblée nationale*, I, 266; *Point du jour*, I, 67; Jallet, 108; Duquesnoy, I, 138; Dorset, I, 226; Young, 183.

[15] *Point du jour*, I, 67; Duquesnoy, I, 138; Jallet, 108; *Bulletins d'un agent secret* (*La révolution française*, XXIV, 76). Under date of June 27, the last writer describes a scene in the Palais Royal on June 26, when Necker's letter of June 24 to the assembly was read. He gives his opinion of the strength of the popular belief in Necker thus: " Je le répéte, jamais ministre n'a joui d'un plus grand triomphe; on le regarde comme un dieu déscendu du ciel pour le salut de la patrie." Bailli de Virieu, 105; Dorset, I, 227; Jefferson, 488; *Letter of a deputy from Paris, le 27, à minuit.*

[16] Duquesnoy, I, 139, 141.

Other men dear to the populace, as Bailly, the Duc d'Orléans and Montmorin, who alone among the ministers was believed to have supported Necker, likewise received the homage of the crowd.[17]

Boullé says that as the joint session of the orders was closing, a police officer came to ask if it would be agreeable to the assembly to have a public celebration. Evidently the assembly approved the request, for, at seven o'clock, an order was issued providing for illuminations for three days. That same night all Versailles was illuminated, bonfires kindled, rockets fired and the "joy was so universal that it seemed as if everyone had met again the person dearest to him, as if every one had gained a personal advantage."[18] Soldiers and citizens alike shared in this joy. The crowds poured out into the gardens and upon the terraces with drums, fifes, and violins to dance for part of the night under the windows of the chateau. All the next day fishwives promenaded the streets with bouquets, to the beat of drums, and the evening of June 28 bonfires and fireworks drew the crowds to the quarter where the Archbishop of Paris lived, as if they would make reparation for their treatment of him on June 24.[19]

Evidently about the time that the orders united in Versailles a manuscript copy of the king's letter to the nobility was published at the Palais Royal, the center of all agitation and revolutionary enthusiasm in Paris. Doubtless to facilitate the spreading of the news of the king's action, the letter is said to have been printed immediately. Shortly afterward, it was announced that

[17] *Letter of a deputy from Paris, le 27, à minuit*; Jefferson, II, 488; *Point du jour*, I, 67; Bailly, I, 253. Bailly says that immediately after adjourning the session, he set out for Chaillot, spreading the news of the union as he went. Hence, he was not at home when the crowd in Versailles called to pay its respects to him. By his own statement (I, 255–56), the inhabitants of Chaillot gave a little fête for him June 28, in his own garden.

[18] Duquesnoy, I, 138–139; *Point du jour*, I, 67; Jallet, 108; Biauzat, II, 147. The last says that he was a spectator of the sights in Versailles until about seven o'clock, when he left for Paris to spend the recess of the national assembly. The same was true of the writer of the letter from *Paris, le 27, à minuit*; Boullé, *Documents inédits, Revue de la rév.*, XIV, 30–31; Bailli de Virieu, 105.

[19] Boullé, *Documents inédits, Revue de la rév.*, XIV, 31.

the nobility had united. Then the capital gave itself over to demonstrations of joy more pronounced than those of Versailles. "The news of the complete union has created, if it be possible, more of a sensation at Paris than at Versailles," was the opinion of a witness of the celebration in Paris, who had also the best of information as to events in Versailles. "Everybody is intoxicated with joy; the general satisfaction is manifested by illuminations and public festivities. Cries of '*Vive le roi, vive le reine, vive M. Necker, vive M. le comte de Montmorin, vive M. le duc d'Orléans!*' are heard everywhere. No more sadness, no more fears, no more misfortune, everything foretells happy days, peace and prosperity"—such was his summary of the general situation in the capital.[20]

All these celebrations and festivities were largely produced, however, by the mere external fact that the orders had united on June 27. But that of itself did not mean very much unless the upper orders and the court were willing to submit to the principles for which the third estate stood, namely, the abolition of orders with their distinctions and veto, and the acceptance of the idea of vote by head with majority rule. The editor of the *Assemblée nationale* interpreted the event as the triumph of the good intentions of the king over the evil advice and continued machinations of the council.[21] An analysis of the king's letter shows, however, either that the king's intentions were malevolent—an interpretation contrary to the popular belief—or that his views were still dominated by the reactionary minority. The very opening phrase, "Alone concerned with the general welfare of my realm" indicates that in no sense had he abandoned his ideas of divinely bestowed prerogatives. Before reaching the end of the first sentence, he had announced positively, through the employment of the term, "assemblée des états-généraux," his intention to preserve the separate orders. The letter makes

[20] *Bulletins d'un agent secret*, No. 49 (*La révolution française*, XXIV, 75). Although the identity of this man is not revealed by his accounts, he seems to keep closely in touch with affairs and is not an extremist in any sense. Bailli de Virieu, 105; Jefferson, II, 488; *Letter from a deputy from Paris, le 27, à minuit*; Biauzat, II, 147.

[21] *Assemblée nationale*, I, 251.

very clear that he had not renounced the policy outlined on June 23. The sole purpose of the union was to hasten the accomplishment of his "paternal views." The only variation from the program proclaimed in the royal session was the definite setting of the time when the orders should meet together to treat general affairs, instead of leaving to the orders themselves the determination of the date for a common session. So far as the king was concerned, the declarations of the royal session were to be executed in full. To effect the operation of the general assembly of the estates, he issued on the 27th of June, a regulation concerning the mandates of the deputies to the estates-general. Its purpose was to render all deputies capable of participation in the assembly, by carrying out the articles of the first declaration which dealt with imperative instructions, especially article V. Deputies so hampered were to request a new convocation of their order. The baillifs or seneschals receiving such petitions were to summon the orders without delay. These would then grant instructions without limitation in harmony with the king's prohibition of imperative mandates.[22]

The decree which the minority of the clergy passed, in deference to the king's letter, declares in as striking a manner that this group was making the declarations of June 23 the basis of its action.[23] The minority of the clergy clearly had no other aim than the execution of the governmental plan of June 23.[24] The protests made by the nobility fully revealed the attitude of many in that order. One further fact shows clearly their intention of insisting upon the distinction of orders. At the close of the session of June 27, the Duke of Luxemburg announced a meeting in the hall of the nobility at nine o'clock on June 30

[22] *Etats-généraux, Extrait du Journal de Paris*, 136–137; Brette, *Recueil de documents*, 56–57.

[23] *Point du jour*, I, 65–66, reproduces the letter said to have been given to the Cardinal de la Rochefoucauld; *Courrier de Provence* (Lettre XIV, 9–10) gives the text of the letter; *Bulletins d'un agent secret*, No. 49 (*La révolution française*, XXIV, 75) has a copy of a portion of the letter sent to the nobility which was posted in the Palais Royal. The copies sent to the orders were the same, Duquesnoy says (I, 139–40), and he gives the letter, said to have been addressed to the Duke of Luxemburg.

[24] Barmond, *Récit*, 278–280.

before the general session at ten o'clock, "indicated by the president of the two other orders."[25]

Furthermore, this interpretation of the significance of the union is confirmed by another occurrence which took place on June 28. On that day, Barentin sent a courrier out to Bailly who had left the city, with a message inviting the latter to come to Versailles to confer with the presidents of the other two orders in regard to the preliminaries for holding the general assembly. Bailly was loath to yield to the summons, first, because it meant the loss of a day of his vacation, and second, because he would have to face an attack upon his position as president of the national assembly. He was determined not to compromise the stand that the assembly had taken, he says, but felt the need of having some approval of his decision. It was not easy to find any of the deputies during the vacation. but he bethought himself of the Duc d'Orléans. He found the duke with the Marquis of Sillery, disclosed his intentions to them, and secured their sanction. At three o'clock, then, he says that he set out for Versailles where the conference was to be held at five. At the home of the guard of the seals, he found the Duke of Croy, vice-president of the nobility, representing the Duke of Luxembourg, and the Cardinal de La Rochefoucauld, accompanied by the Archbishop of Aix, for the minority of the clergy. Bailly says that, as he had surmised, the question of the presidency was the point of the discussion. Their contention was that the president of the clergy should preside over the general assembly, but Bailly adds that he met their arguments so effectively that this bold demand was practically abandoned. Finally, they proposed that the leaders of the two upper orders should sit on the front benches and each have a table before him, as a mark of recognition. Bailly continues that he told them that such a privilege could be accorded only by the assembly itself. Thus the conference ended.[26] In every respect the government was

[25] *Procès-verbal . . . de la noblesse*, 304.

[26] Biauzat, II, 147–148; Bailly, I, 256–260. Biauzat, writing from Paris under date of June 29, 1789, says: "J'ai appris, sur les huit heures du soir, que M. le garde des sceaux avait écrit hier à M. Bailly, notre président, pour l'inviter à se rendre à la chancellerie aujourd'hui sur les cinq heures, afin d'y

committed to the ideas of the first declaration of the king,—of that there could be no doubt.

Yet, close observers of the situation looked upon the action of June 27 as a repudiation of the declarations of June 23. Count Mercy wrote on July 4 that after the union of the orders "there reigns a moment of calm, much more apparent than real. . . . The king has purchased this momentary truce by the most cruel sacrifice, that of retracting his wishes solemnly proclaimed in the royal session of June 23."[27]

Arthur Young held that the king had overturned "his own act of the *séance royale* by requiring them [the upper orders] to join the commons, full in the teeth of what he had ordained before."[28] The author of the *Correspondance secrète* in the Russian archives declared on June 27:[29] "The commons and, dare we say it, the nation triumph! Is it reason and justice, is it fear alone which has effected this strange revolution? Good citizens do not attempt to fathom this question. . . . The union is a grand fact. The experience of its powers and the authorization of more than nine tenths of the nation will soon place the patriotic party in a position to surmount all difficulties. The decree of the council and the imperative course of the king of June 23, are annulled, and as soon as the verification of credentials has been completed, there is no doubt that the establishment of a new constitution will be the first object of the deliberations."

Jefferson considered that the "great crisis" was over: "The triumph of the *Tiers* is considered as complete. Tomorrow

conférer avec M. le cardinal de La Rochefoucauld, président de la minorité du clergé et M. le duc de Luxembourg, président de la majorité de la noblesse sur des prétendus préliminaires à l'assemblée d'aujourd'hui." The use of the *aujourd'hui* at the close seems to be an error. Otherwise, the account tallies with Bailly's own report. Biauzat had not learned what action Bailly had taken in regard to the invitation, so we are dependent upon Bailly alone for the details of his arrangement for, and participation in, the conference.

[27] Arneth and Flammermont, *Correspondance secrète de Comte de Mercy-Argenteau avec l'empereur Joseph II et le Prince de Kaunitz*, II, 253.

[28] Young, 182.

[29] Lescure, *Correspondance secrète inédite sur Louis XVI, Marie-Antoinette, la cour et la ville de 1777 à 1792*, II, 366–367.

[June 30] they will recommence business, voting by persons on all questions; and whatever difficulties may be opposed in debate by the malcontents of the clergy and nobility, everything must finally be settled at the will of the *Tiers*. It remains to be seen whether they will leave to the nobility anything but their titulary appellations."[30]

The day after the reunion, June 28, Dorset stressed the unhappy position of the French nobility:[31] "Nothing can equal the despondency of the nobility upon this occasion, forced as they have been, by an extraordinary and unexpected impulse to sacrifice in one moment every hope they had formed and the very principles from which they had resolved and flattered themselves that no consideration whatever should oblige them to depart."

Arthur Young, who clearly comprehended what the ultimate result of this union was to be, states of the attitude of the upper orders: "I have today had conversation with many persons on this business; and to my amazement, there is an idea, and even among many of the nobility, that this union of the orders is only for the verification of their powers and for *making the constitution*, which is a new term they have adopted; and which they use as if a constitution was a pudding to be made by a receipt."[32] In general, the indications are that the deputies of the upper orders regarded the union or, perhaps, pretended to regard it, as but a temporary expedient to facilitate matters of procedure.

On the other hand, some of the deputies of the third estate themselves feared that the union might prove disastrous to them. Biauzat saw in it the possibility of various difficulties for the national assembly. He suspected that those hostile to the public welfare wished the orders to be organized as an estates-general that "they might with facility interrupt all work by the disunion of a single one of the orders," thereby plunging the third estate anew into all the difficulties from which their organization as national assembly had rescued them. He feared also that the statement in the king's letter, touching imperative

[30] Jefferson, II, 489.
[31] Dorset, I, 227.
[32] Young, 183.

instructions, was merely another trap for the third estate. In his opinion, that provision presupposed the calling of new provincial assemblies, to change the instructions, a circumstance that would delay the assembly since it did not wish to proceed irregularly. But a more dangerous consequence, he held, might be the recognition of the right of the king alone to exercise legislative power, even during the sessions of the states-general. Besides these fears, he saw an opportunity for the nobility to refuse to submit their credentials to a new verification in the assembly, since the king had emphasized their acceptance of the declaration of June 23. Article two of the first declaration dispensed with the submission to common verification of credentials already verified in the pretended chamber of the nobility.[33]

But, although thinking men were fully conscious of the dangers to the progress of the assembly, there was also the settled conviction that this union of the orders was a step toward the ultimate triumph of the ideas of the national assembly and toward a new era for France. The editor of the *Assemblée nationale* regarded this event as the final termination of the two long months of debate that had agitated France; as the forerunner of a union, "so generally and so ardently desired, by the monarch and by all the French people."[34]

Although fully conscious of the causes of the union, Boullé believed that it settled the method of sitting and, presumably, of voting: "Seeing in the assembly the greatest enemies of the nation, such as a D'Eprémesnil, an Abbé Maury, no one has been duped by this union, nor has any one attributed it to other motives than to the impossibility of dispensing with it. I do not know whether the intention was to place some restrictions upon the union, to raise quibbles, for example, upon the mode of deliberation, a question upon which the result of circumstances has forced a decision, even before it has been discussed; it is certain that the public regard what has just occurred as a complete victory over the aristocracy."[35]

[33] Biauzat, II, 148.

[34] *Assemblée nationale*, I, 263.

[35] Boullé, *Documents inédits*, *Revue de la révolution*, XIV, 30.

Duquesnoy assumed that the verification of credentials in common was assured by this step and he went on to discuss the relation of that principle to the matter of vote by head. "It is true," he wrote, "that they have talked of this object only, and have not explained themselves as to vote by head or order, but, on the other side, the opinion of the majority of the clergy is sufficiently known, that of individuals who compose the nobility is not more hidden and all recognize that the verification in common is only a subterfuge, which has served as the pretext for our quarrels, of which the sole object has always been vote by head. Besides, the motives which have directed the nobility are much more powerful for the vote than they ever were for the common verification of credentials."[36]

The *Point du jour* of June 29 is given over to a review of the conditions under which the assembly had labored before the union and then to a most optimistic and far-reaching augury as to what that union would mean for the future of the French nation.[37] Barere charged to the reactionaries about the king all the adverse circumstances that had impeded the action of the assembly. On their advice, troops had been stationed around the hall, but the assembly had dared to protest against the military occupation for this reason. Although the "minds and votes of the deputies would have been as free in the midst of a camp and the din of arms as in the midst of a senate, . . . it was not sufficient for the members of the national assembly to be free; it was necessary besides that they should be believed to be free." Another move of the malicious aristocracy had been to slander the national representatives both to the king and to the people; they had presented to the deputies "under the form of law some favors and some sacrifices of authority in order to cause them to acquiesce, by this bait, in the legislative power or to force them to a resistance which would render them out of favor even with their constituents. But to offset these

[36] Duquesnoy, I, 137–138.

[37] *Point du jour*, I, 69–72; *La révolution française*, XXIV, 77; *Bulletins d'un agent secret*, No. 49. The writer of the bulletin has made the *Point du jour* the basis of his observations on the significance of the union of the orders. The copying is largely literal.

calumnies, the assembly proposed an address to the king in exposition of its true principles," an address which should show also that corrupting the power of the monarch to the point of causing him to change its nature is to commit a crime of *lèze-majesté* against him and that making him doubt, for an instant, the inviolable fidelity of the French to his person, is a crime of *lèze-nation.*"

"But the total union of the national representatives in the same assembly occurred to render useless these unfortunate precautions for which a faithful people should never recognize the necessity. From the first instant of this union, hatred and rivalries have disappeared. . . . The king has finally learned that the court is not his people." Then rising to a broader conception of the assembly's mission after the final union of the orders, he declared that it was under the "rule of public opinion" rather than the "reign of custom," that the constitution of the state was to be framed. "The time is past," he fearlessly proclaimed, "when, under the imposing veil of constitutional rights, a small number of representatives has too much power to limit and where the great number never has enough to act; where a privileged class can oppose the general welfare and the less numerous portion of the nation constantly prevails over the entire nation. The power of public opinion will finally destroy the bondage of abuses; the courageous and enlightened patriotism which animates all the national representatives will at last effect the grandest revolution which has occurred upon the earth, when the constitution of a great realm shall have been watered, neither with tears nor with blood."

How this sublime augury was actually to work out, Arthur Young foretold with almost prophetic vision, it might seem, when he gave his views on the ultimate significance of the union of June 27. Of the king's action, he wrote: "He was thus induced to take this step which is of such importance, that he will never more know where to stop or what to refuse; or rather, he will find that in the future arrangement of his kingdom, his situation will be very nearly that of Charles I, a spectator, without power, of the resolutions of a long parliament." That the act of union carried with it the triumph of the third estate,

he felt assured. "In vain I have asked, where is the power that can separate them hereafter, if the commons insist on remaining together, which may be supposed, as such an arrangement will leave all the power in their own hands? . . . The event now appears so clear as not to be difficult to predict; all real powers will be henceforward in the commons; having so much inflamed the people in the exercise of it, they will find themselves unable to use it temperately; the court cannot sit to have their hands tied behind them; the clergy, nobility, parliaments and army will, when they find themselves all in danger of annihilation, unite in their mutual defense; but as such a union will demand time, they will find the people armed and a bloody civil war must be the result."[38]

But neither the king nor the court recognized in the union of the orders on June 27, the significance attributed to it by Young. In their conception, the union of the orders by request of the king, was but an expedient for gaining time until the troops, which were to make possible the successful execution of the policy proclaimed on June 23, should have arrived at Paris. The *coup d'état* of July was the result of their attitude toward the situation created by the royal session.

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Besides other material, this volume includes four different sources for the sessions of the clergy. The pages run consecutively throughout the volume. The four accounts are: (1) *Journal des séances du clergé assemblé à Versailles pour les états-généraux . . . rédigé par* M. Thibault; (2) *Récit de ce qui s'est passé dans l'ordre du clergé depuis le 19 juin jusqu'au 24 du même mois;* (3) *Récit de ce qui s'est passé dans l'ordre du clergé;* (4) *Récit des séances du clergé.* On page 1 of the fourth account is found the following note: "Le journal qui précède est celui des séances du clergé rédigé par le secrétaire que la chambre avait nommé officiellement. *Un autre membre du clergé,* M. Coster, ayant, de son côté, rédigé le récit

[38] Young, 183–184.

des mêmes séances dont une copie exacte nous est parvenue, nous avons pensé qu'il serait agréable au public d'avoir l'un et l'autre récit sous les yeux."

In referring to these four sources, the first will be designated as Thibault. He was one of the provisional secretaries of the chamber, Dillon, the other, but both went with the majority to the national assembly on June 24. The second source is a memoir justifying the course of the minority of the clergy in the deliberation of June 19 and 24. It was drafted between the sessions of June 26 and 27 and submitted to the assembly for ratification on the latter date. It will be referred to simply as *Récit.* The third is the official minutes drafted by Barmond, the secretary chosen by the minority on June 24. It will be referred to as Barmond, *Récit.* The fourth will be designated as Coster, *Récit.*

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University Studies

Published by the University of Nebraska

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Smithsonian Institution
JUN 29 1934
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Lincoln, Nebraska

UNIVERSITY STUDIES

VOL. XVII OCTOBER, 1917 No. 4

NEW SPECIES OF SPHECOIDEA FROM THE CENTRAL AND WESTERN STATES

BY CLARENCE E. MICKEL

LINCOLN, NEBRASKA

The following descriptions of new species have been drawn from material collected for the most part in Nebraska and California but also including some from Wyoming, Colorado and North Dakota. A large part of the material was collected during the seasons of 1916 and 1917. The types of all the species here described are in the entomological collection of the University of Nebraska.

Family **SPHECIDAE**

Subfamily **Nyssoninae**

Hoplisus corrugis sp. nov.

♂. Length 10 mm. Black with yellow markings. Head black; covered with sparse silvery pubescence; eyes strongly converging below; space between the eyes at the base of the clypeus about one fourth more than the median length of the clypeus; front very finely punctate with a median longitudinal impressed line from the anterior ocellus to the base of the antennae; ocelli situated on a slight prominence, the distance between the posterior ones greater than the distance between the lateral ocelli and the nearest eye margin; palpi, small basal spot on mandibles, labrum, clypeus, subraclypeal area, inner eye margins, scape and pedicel beneath, all yellow. Thorax black; covered with a very sparse silvery pile; shining, very minutely punctured; mesepisterna shining, impunctate; suture between mesonotum and scutellum foveolate; propodeum with a deep median, longitudinal sulcus; enclosed space of propodeum triangular, coarsely sculptured but scarcely reticulate; posterior face of propodeum coarsely reticulate; lateral spots on pronotum, spot on mesepisterna beneath the tegulae, and minute, median spot on the posterior margin of the scutellum, all lemon-yellow. Abdomen black, shining, with a sparse,

short, silvery pile; very minutely punctate, the posterior segments slightly more strongly punctured than the anterior ones; first abdominal tergite with a broad, yellow fascia on the posterior margin, deeply and widely emarginate medially, second abdominal tergite with a yellow fascia on the posterior margin, very broadly emarginate on the anterior margin; third abdominal tergite with a yellow fascia on the posterior margin, the fascia suddenly widened laterally; fourth and fifth abdominal tergites with narrow yellow fasciae, widely interrupted medially; second abdominal sternite with a median and lateral yellow spots on the posterior margin. Coxae and trochanters black; femora black, except anterior and intermediate ones more or less yellow at the tip, and distal half of posterior ones testaceous; tibiae yellow, anterior and intermediate ones with a black spot posteriorly, and posterior ones black posteriorly; anterior and intermediate tarsi yellow, posterior tarsi testaceous. Wings subhyaline, with the usual fuscous cloud in the marginal cell; stigma yellowish; cubital cell in hind wings terminating very little beyond the origin of the cubital nervure.

♀. Unknown.

Type, a male taken at Mitchell, Nebraska, June 16, 1916 (C. E. Mickel).

Runs in Fox's table to *atricornis* but differs from that species by the coarse and irregular sculpture of the propodeum and the markings of the head, thorax and abdomen.

Subfamily **Oxybelinae**

Notoglossa albomaculata sp. nov.

♂. Length 7 to 8 mm. Head black, clothed with silvery pubescence; clypeus 5-dentate; frons, vertex and cheeks with close, deep punctures; space between the two posterior ocelli distinctly more than twice the distance between the lateral ocelli and the nearest eye margin; flagellum reddish beneath. Thorax black, covered with sparse, silvery pubescence; prothorax anteriorly with a strong, sharp carina, interrupted medially; mesonotum, scutellum and mesepisterna with close, deep punctures; scutellum and metanotum with a median, longitudinal carina; lateral points of the squamae much exceeding the tips of the squamae; metanotal spine grooved, broader at the tip, broadly and roundly emarginate; enclosed area of propodeum, beneath the spine, obliquely striate; posterior face of propodeum closely punctate; metapleura striato-punctate; squamae whitish; tip of metanotal spine brownish; tegulae reddish; spot on posterior lobes of pronotum whitish. Abdomen black, with very sparse, fine, silvery pubescence; strongly punctured; more so on the basal than on the apical segments; first abdominal tergite with a median, longitudinal sulcus;

third, fourth, fifth and sixth abdominal tergites with lateral spines; pygidial area rather narrow, sides parallel, punctured; seventh abdominal sternite broadly, roundly and deeply emarginate, making the sternite appear bifid; first, second, third and fourth abdominal tergites with a white fascia posteriorly, interrupted medially; fifth, sixth and seventh abdominal segments entirely ferruginous. Legs entirely black, except anterior tibiae and tarsi testaceous; a line at the tip of the intermediate femora and a minute spot at the base of the intermediate tibiae whitish.

♀. Unknown.

Type, a male collected at Mitchell, Nebraska, July 21, 1916 (C. E. Mickel). One male paratype collected at Mitchell, Nebraska, July 21, 1916.

Similar to *cockerelli,* but there is no median tubercle on the vertex and the occiput is punctate rather than striato-punctate. Easily identified by the three ferruginous, apical abdominal segments and the white markings of the abdomen.

The paratype lacks the white on the posterior lobes of pronotum, femora and fourth abdominal tergite.

Oxybelus pectorosus sp. nov.

♂. Length 7 to 8 mm. Head black, covered with appressed silvery pubescence; clypeus three-dentate; front and vertex with strong, rather sparse punctures; occiput approaching rugoso-punctate; distance between the posterior ocelli a little more than twice the distance between the lateral ocelli and the nearest eye margin; flagellum reddish on the greater part, blackish basally. Thorax black, covered with sparse, silvery, appressed pubescence; mesonotum with strong, rather sparse punctures interspersed with fine rugae; mesepisterna coarsely punctured; mesepisterna strongly produced at the lower, anterior margin forming a prominent projection; scutellum punctured, with a median longitudinal carina; squamae long, with the tips very acute; metanotal spine apparently truncate (tip of spine broken), broadest just before the tip; area beneath the spine obliquely rugose; posterior face of propodeum transversely rugose, with a large, triangular, shining fovea medially; metapleura transversely rugose; tegulae testaceous. Abdomen black, covered with sparse silvery pubescence; first abdominal tergite with a median longitudinal sulcus; abdominal segments without any traces of lateral spines, rather strongly punctured; first abdominal tergite with obscure whitish lateral spots on the posterior margin; abdominal tergites one, two and three silvery fasciate; posterior margin of the fourth, and the fifth, sixth and seventh abdominal segments ferruginous. Anterior tibiae and tarsi red-

dish; spot at base of intermediate and posterior tibiae whitish; remainder of legs black.

♀. Unknown.

Type, a male collected at Mitchell, Nebraska, July 17, 1916 (C. E. Mickel); on *Melilotus alba.*

Related to *major* by the peculiar structure of the mesepisterna, but is much smaller than that species and has the last three segments of the abdomen ferruginous.

Oxybelus delicatus sp. nov.

♂. Length 8 mm. Head black, covered with sparse, silvery pubescence, except the frons where the pubescence is more dense and appressed; clypeus five-dentate; frons and vertex finely punctured; occiput finely striato-punctate; distance between the posterior ocelli equal to twice the distance between the lateral ocelli and the nearest eye margins; mandibles reddish except the tips; flagellum largely reddish, blackish basally. Thorax black, covered with sparse, silvery pubescence; mesonotum and mesepisterna finely punctured; scutellum and metanotum with a median longitudinal carina; metanotal spine grooved and truncate at the tip; area beneath the metanotal spine reticulate; a wedge-shaped fovea on the posterior face of the propodeum; remainder of posterior face of propodeum very finely punctured with scattered transverse rugae; metapleura rugoso-punctate; tegulae translucent with a basal yellow spot; lateral spots on pronotum, posterior lobes of pronotum and small spot on squamae, lemon-yellow. Abdomen black, with very fine sparse, silvery pubescence; first abdominal tergite with a median longitudinal sulcus; abdominal segments without any traces of lateral spines; abdomen with fine, well-separated punctures; abdominal tergites one, two, three and four with wide, lateral, lemon-yellow spots, those on the first segment the largest; and these tergites with more or less obscure silvery fasciae on the posterior margin; abdominal segments five, six and seven ferruginous. Anterior tibiae reddish in front, black behind; anterior tarsi reddish; spot at tip of intermediate femora, and base of intermediate and posterior tibiae, lemon-yellow; remainder of legs black.

♀. Unknown.

Type, a male collected at Mitchell, Nebraska, July 17, 1916 (C. E. Mickel), on *Melilotus alba.*

Distinguished by the fine puncturation of the body, the five-dentate clypeus, lack of lateral spines on the abdomen, the lemon-yellow markings of the abdomen and the three apical segments of the abdomen ferruginous.

Oxybelus unicus sp. nov.

♀. Length 9 to 11 mm. Head black, covered with sparse, silvery pubescence, that on the front appressed; clypeus with a strong median tubercle; front, vertex and occiput with strong well-separated punctures; distance between the posterior ocelli equal to three times the distance between the lateral ocelli and the nearest eye margin; mandibles except the tips, yellowish; flagellum reddish beneath, black above. Thorax black, covered with very sparse, silvery pubescence; mesonotum and mesepisterna with strong, well-separated punctures; posterior fifth of mesonotum, scutellum and metanotum with a median, longitudinal carina; squamae having the appearance of being united; metanotal spine grooved and acute at the apex; posterior face of propodeum with a large, shining, wedge-shaped fovea medially; remainder of posterior face of propodeum finely punctate with transverse scattered rugae; metapleura finely punctate, transversely rugose near the posterior margin; tegulae reddish, translucent; lateral spots on pronotum extending onto the tubercles, lateral spots on scutellum and line on metanotum connecting the squamae, all yellowish. Abdomen black, covered with sparse, silvery pubescence; abdomen with strong, well-separated punctures; first abdominal tergite with a shallow, median, longitudinal sulcus; pygidial area triangular, strongly punctured, narrowly emarginate at the apex, with golden pubescence; lateral spots on tergites one, two, three and four, yellowish, those on the basal tergites larger and more widely separated than those on tergites three and four; apical segment reddish. Anterior and intermediate femora beneath on the apical two thirds, and all the tibiae posteriorly, yellowish; anterior tibiae reddish anteriorly; all the tarsi reddish.

♂. Unknown.

Type, a female collected at Mitchell, Nebraska, July 21, 1916 (C. E. Mickel). Four female paratypes collected at Mitchell, Nebraska, July 20, 21, and 22, 1916 (C. E. Mickel).

Easily recognized by its large size, the squamae having the appearance of being united, markings on the scutellum and yellowish mandibles.

Oxybelus mottensis sp. nov.

♀. Length 10 mm. Head black, covered with very sparse, short, silvery pubescence; clypeus with a strong median tubercle; front finely punctured; vertex strongly punctured; occiput with coarse punctures, tending to be rugoso-punctate; distance between the two posterior ocelli a little more than twice the distance between the lateral ocelli and the nearest eye margin; flagellum brownish. Thorax black, covered with sparse, silvery pubescence; mesonotum with coarse punctures; mesepisterna longitudinally rugoso-punctate; scutellum without a median longitudinal carina;

metanotal spine very acute; upper surface and enclosed area of propodeum reticulate, the median fovea shining and almost rectangular; posterior face of propodeum finely punctate; metapleura granulate with fine, irregular rugae; lateral spots on pronotum, posterior lobes of pronotum, spot on tegulae, lateral spots on scutellum, metanotum entirely, all yellow. Abdomen black, shining, with strong, widely separated punctures; tergites one and two with lateral yellow spots, those on tergite one the larger and more widely separated; tergites three, four and five with a narrow yellow fascia posteriorly; sometimes the fascia on tergite three is narrowly interrupted medially and that on tergite five is reduced to two lateral spots. Apical half of anterior and intermediate femora beneath, and all the tibiae outwardly, yellowish; remainder of legs black.

♂. Unknown.

Type, a female collected at Mott, North Dakota, August 31, 1914 (J. R. Campbell), on *Solidago canadensis*. One female paratype collected at Mott, North Dakota, September 20, 1914 (J. R. Campbell), on *Solidago mollis*.

Easily recognized by the large size, lack of a longitudinal carina on the scutellum and the metanotum being entirely yellow.

Subfamily **Craboninae**

Solenius (Pseudocrabro) conspiciendus sp. nov.

♂. Length 6 to 8 mm. Head black; clypeus and front with dense, appressed, silvery pubescence; vertex, occiput and genae with very sparse, silvery pubescence; anterior margin of clypeus rounded; frons, vertex, occiput and genae with very fine, close punctures; ocelli in a low triangle, the distance between the posterior ones less than the distance between the lateral ocelli and the nearest eye-margin; first and second joints of the flagellum about equal in length; second and third joints of the flagellum very slightly emarginate beneath; fourth joint of flagellum deeply emarginate beneath; occiput and genae with a very broad foveolate margin; mandibles except the tips, and scape except spot behind, yellow. Thorax black, covered with very sparse, silvery pubescence; pronotum with a transverse carina, interrupted medially and very strongly dentate laterally; mesonotum with close, medium, confluent punctures; scutellum and metanotum punctate; prepectus and mesepisterna with medium-sized, separated punctures; propodeum above coarsely sculptured, punctured and reticulate; posterior face of propodeum coarsely sculptured; metapleura transversely rugose; band on the pronotum interrupted medially, posterior lobes of pronotum, sometimes spot on prepectus above, sometimes line on metanotum, all yellow. Abdomen black, with fine, well-separated punctures; second, third, fourth and fifth tergites with lateral spots, yellow,

those on the fifth segment rather approximate. Anterior tarsi not flattened; legs black; line on anterior femora beneath, tips of intermediate femora, all the tibiae except a large spot behind, and first joint of all the tarsi, all yellow.

♀. Length 8 to 9.5 mm. Similar to the male; differs as follows: antennae entire; more yellow on the pronotum; large spot on prepectus yellow; scutellum and metanotum both yellow; pygidium narrowed and excavated at the tip.

Type, a male collected at Auburn, California, July 26, 1916 (L. Bruner). Allotype, a female collected at Auburn, California, September 20, 1916 (L. Bruner). Seven male paratypes as follows: Auburn, California, July 15, 1916 (L. Bruner); July 26, 1916 (L. Bruner) (2); September 20, 1916 (L. Bruner) (2); Sacramento, California, October 3, 1916 (L. Bruner), and October 6, 1916 (L. Bruner). Four female paratypes as follows: Auburn, California, July 26, 1916 (L. Bruner); September 20, 1916 (L. Bruner) (2); and Sacramento, California, September 28, 1916 (L Bruner).

Related to *odyneroides* but differs from that species by the broadly margined occiput, the strongly dentate pronotum and other characters such as puncturation and coloration.

Crabro (Hoplocrabro) vierecki H. S. Smith.

1908. *Crabro vierecki* H. S. Smith, Univ. Nebr. Studies, VIII, p. 401.

A specimen of this species was taken July 5, 1917, at Worland, Wyoming, by L. Bruner. This record considerably extends the known range of this species.

Subfamily **Philanthinae**

Philanthus siouxensis Mickel.

1916. *Philanthus siouxensis* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 406.

Third word, line 24, page 407, should read "female" instead of "male."

KEY TO THE SPECIES OF OCOCLETES

1. Abdomen with rather close, moderate to fine punctures 2
   Abdomen shining, with scattered, larger punctures 4
2. Ground color of basal abdominal segment black 3
   Ground color of basal abdominal segment red .....*basilaris*

3. Distance between two posterior ocelli of male equal to the distance between them and the nearest eye-margin; femora of female reddish ..... *sanborni*
   Eyes of male at vertex almost touching posterior ocelli ..... *scutellaris*
4. Ground color of basal abdominal segment black; apical tergites maculated with yellow 5
   Ground color of basal abdominal segment red; four apical tergites immaculate ..... *bicinctus*
5. Markings of body yellow 6
   Markings of body white ..... *nitens*
6. Front above the insertion of the antennae finely rugoso-punctate, tergites one and two with lateral spots 8
   Front above the insertion of the antennae with moderate, well-separated punctures; tergites one and two with complete fasciae 7
7. Eyes of male at vertex almost touching the posterior ocelli; first six joints of flagellum beneath yellowish ..... *zebratus*
   Distance between posterior ocelli almost equal to the distance between them and the nearest eye-margin; first four joints of flagellum beneath yellowish ..... *hirticulus*
8. Scutellum and propodeum not marked with yellow ..... *illustris*
   Scutellum and propodeum marked with yellow ..... *ventralis*

Ococletes hirticulus sp. nov.

♂. Length 19 to 20 mm. Black, shining; head covered with very long pale-golden pubescence; first joint of flagellum almost as long as the length of the second, third and fourth combined; distance between the two posterior ocelli greater than the distance between the lateral ocelli and the nearest eye-margin; frons, vertex and occiput with well-separated moderate punctures; clypeus, frons entirely up to a line drawn through the center of the anterior ocellus (except a narrow line along the eye-margins above the emargination of the eyes), scape, pedicel, first four joints of flagellum beneath, and a large spot behind the eyes, all lemon-yellow. Thorax covered with long, pale-golden pubescence; pronotum shining, impunctate; mesonotum with well-separated moderate punctures, with a wide, median longitudinal impressed line anteriorly, and a narrow, median longitudinal impressed line laterally near each tegula; scutellum shining, very sparsely punctured; prepectus, mesepisterna and sides of propodeum with fairly close, shallow punctures; propodeum above punctured, channeled medially; very broad band on pronotum, tegulae, spot on posterior lobes of pronotum, and a large spot on prepectus above, all lemon-yellow. Abdomen shining, first segment with long, conspicuous, pale-golden pubescence; remaining tergites with sparse, inconspicuous pubescence; all the sternites with very long, conspicuous, brownish pubescence, thickest and longest laterally; first tergite with well-

separated moderate punctures; punctures on the second tergite more sparse; remaining tergites with very sparse punctures, almost impunctate; broad band on first tergite (narrowly and deeply emarginate anteriorly, and shallowly triemarginate posteriorly), all of second tergite (except a shallow emargination posteriorly), posterior half of tergites three, four, five and six, and spot on tergite seven, all lemon-yellow; sternites one and two tending to reddish. Coxae, trochanters, anterior femora (except distal half beneath, and distal third above), and intermediate and posterior femora (except the tips), black; remainder of legs lemon-yellow. Wings strongly tinged with yellowish.

♀. Unknown.

Type, a male collected at Ute Creek, Colorado, Sage Flats, August 15, 1907 (L. Bruner). Three paratypes from same locality: August 14, 1907 (L. Bruner); August 15, 1907 (H. S. Smith), and August 15, 1907 (R. W. Dawson).

Related to *sanborni* Cresson, but differs in the much larger size, in the abdomen being much more shining and sparsely punctured; abdomen more pubescent beneath, and in the yellow much more extended on the frons and tergites.

Ococletes illustris sp. nov.

♀. Length 13 to 14 mm. Black, shining; head covered with rather short, pale pubescence; frons above the insertion of the antennae finely rugoso-punctate; vertex and occiput shining, very sparsely punctured; distance between the posterior ocelli greater than the distance between the lateral ocelli and the nearest eye-margin; first joint of the flagellum longer than joints two and three combined; mandibles except the tips, clypeus, supraclypeal area, frons along the eye-margins a little above the emargination of the eyes, large spot on frons above insertion of antennae (this spot connected with the supraclypeal area), scape beneath, and spot behind the eyes, all lemon-yellow. Thorax covered with short, pale pubescence; pronotum impunctate; anterior fifth of mesonotum closely punctured, remainder of mesonotum with very scattered punctures; scutellum almost impunctate; mesepisterna with moderate, well-separated punctures; sides of propodeum with sparse fine punctures; propodeum above punctured, channeled medially; interrupted band on pronotum, tegulae, spot on prepectus above, and line on metanotum, all lemon-yellow. Abdomen shining; basal segments with scattered, coarse punctures; apical segments almost impunctate; widely separated lateral spots on first tergite; large widely separated spots on second tergite, bands on tergites three and four, and tergites five and six almost entirely, all lemon-yellow. Legs black; wide line on anterior femora beneath, tips of intermediate and

posterior femora, all the tibiae (except a reddish area posteriorly), all lemon-yellow; all the tarsi reddish. Wings tinged with yellowish.

♂. Unknown.

Type, a female collected at American River, Placer county, California, August 20, 1916 (L. Bruner). One paratype, Donner Lake, Placer county, California, August 24, 1916 (L. Bruner).

Distinct in the very sparse puncturation of the thorax and abdomen. May possibly be the female of *zebratus*.

Ococletes ventralis sp. nov.

♀. Length 15 to 16 mm. Black, shining; head covered with rather long, pale pubescence; frons finely rugoso-punctate above the insertion of the antennae; vertex and occiput shining, with sparse punctures; distance between the two posterior ocelli slightly greater than the distance between the lateral ocelli and the nearest eye-margin; first joint of the flagellum slightly longer than the second and third joints combined; mandibles (except apical third), clypeus, supraclypeal area, frons laterally up to emargination of eyes and a large, almost rectangular area medially (except a small black spot in the middle of this area), spot behind the eyes, scape beneath, and first two joints of flagellum beneath, all lemon-yellow. Thorax with rather long, pale pubescence; mesonotum with moderate punctures (rather close anteriorly and posteriorly); scutellum almost impunctate; mesepisterna and sides of propodeum with moderate, well-separated punctures; propodeum above punctured, channeled medially; band on pronotum interrupted medially, tegulae, small spot on posterior lobes of pronotum, prepectus above, two spots on scutellum, metanotum and two large lateral spots on the propodeum, all lemon-yellow. Abdomen shining, the first segment with conspicuous pale pubescence; first tergite rather closely punctured laterally; remaining tergites with scattered punctures; large lateral spots on tergites one and two, band on tergite three narrowed medially, bands on tergites four, five, and six, lateral spots on sternite two, sternites three and four with bands greatly widened laterally, and lateral spots on sternite five, all lemon-yellow. Legs black; all the femora anteriorly and the apical third posteriorly, all the tibiae and tarsi, all lemon-yellow. Wings tinged with yellowish.

♂. Unknown.

Type, a female collected at Sacramento, California, October 6, 1916 (L. Bruner).

Quite distinct in the scattered puncturation of the abdomen, the yellow on the propodeum and on the abdomen ventrally.

Subfamily **Trypoxyloninae**

Trypoxylon arizonense Fox.

1891. *Trypoxylon arizonense* Fox, *Trans. Amer. Ent. Soc.*, XVIII, p. 145 ♀.

♂. Similar to the female; differs as follows: in size slightly smaller, clypeus and frons up to the emargination of the eyes covered with dense, bright-golden pubescence; clypeus broadly incurved medially with a tooth in the middle of the incurvation (very similar to the clypeus of *spinosum*); propodeum above transversely striate as in the female; posterior trochanters with a strong spine apically; legs entirely black.

Allotype, a male collected at Riverton, California, August 6, 1916. Collected at the same time and place as a female specimen of *arizonense*.

Subfamily **Larrinae**

Larropsis yatesi sp. nov.

♂. Length 7 mm. Head black; clypeus rounded, finely punctured; frons, vertex and occiput with close, moderate punctures; space between the eyes at the vertex three to four times as great as the length of second and third antennal joints; first joint of flagellum about half as long as second. Thorax black; mesonotum, scutellum, prepectus and mesepisterna finely punctured; metanotum granulate; propodeum above with a shallow, foveolate, longitudinal sulcus; basal margin of propodeum foveolate; remainder of propodeum above finely rugose; sides of propodeum rugoso-punctate. Abdomen black, with a sparse, fine, silvery pile; finely sparsely punctate. Legs black; all the tibiae feebly spinose. Wings hyaline; tegulae and venation of wings testaceous.

♀. Unknown.

Type, a male collected at Mitchell, Nebraska, August 2, 1917 (E. J. Yates), on *Melilotus alba*.

Related to *minor* from which it differs in the relative lengths of the first two joints of the flagellum and sculpture of the propodeum.

Larropsis rubens sp. nov.

♀. Length 7.5 mm. Head black; clypeus very slightly emarginate medially, bidentate laterally; apical half of clypeus shining, with large punctures, basal half finely and closely punctured; frons with moderate punctures; ocellar area, occiput and genae very finely punctate; space between the eyes at the vertex about equal to antennal joints one and two; first joint of flagellum very slightly shorter than the second. Thorax black; mesonotum, scutellum, prepectus and mesepisterna very finely and

closely punctured; propodeum foveolate on basal margin; finely rugose on the disc; sides and posterior face of propodeum transversely striate. Abdomen bright ferruginous; finely, sparsely punctured; pygidium with large sparse punctures. Legs black, the tarsi piceous. Wings hyaline, venation dark.

♂. Unknown.

Type, a female collected at Mitchell, Nebraska, September 6, 1916 (R. W. Dawson).

Related to *aurantia,* but is much smaller than that species.

Subfamily **Pemphredoninae**

Stigmus reticulatus sp. nov.

♀. Length 5 mm. Clypeus produced medially, very slightly emarginate, punctured; inner eye-margins converging towards the clypeus; head very finely sculptured, with very sparse, shallow punctures; pedicel very slightly longer than the first joint of the flagellum; first and second joints of flagellum about equal in length. Pronotum dentate laterally, foveolate dorsally; mesonotum very finely rugose anteriorly in the vicinity of the impressed lines, glabrous posteriorly; scutellum glabrous; propodeum above strongly reticulate, posteriorly with a broad median channel, wider on the apical half, and crossed once or twice by transverse striae; remainder of posterior face reticulate; triangular enclosed space on mesepisterna about as large as in *americanus;* sides of propodeum sparsely, transversely rugose; petiole of abdomen sulcate above, the sulcus transversely rugose. Abdomen impunctate; the pygidium about one and one half times as long as wide. Body black; mandibles except the tips, scape beneath and posterior lobes of the pronotum, whitish; anterior trochanters, tibiae and tarsi, intermediate tibiae and tarsi, posterior tarsi, and posterior lobes of pronotum, all testaceous; abdomen iridescent. First recurrent nervure received beyond the middle of the first submarginal cell; stigma and venation dark.

♂. Unknown.

Type, a female collected at Inverness, Marin county, California, August 27, 1916 (L. Bruner).

Related to *fraternus,* but distinct from that species in the whitish scape and dark flagellum, the mesonotum finely rugose anteriorly and the reticulate propodeum.

Family **BEMBICIDAE**

Subfamily **Stizinae**

Stizus strenuus sp. nov.

♂. Length 9 mm. Head black, with a short, silvery pile and sparse, long, silvery hairs; antennae inserted far above the clypeus, the distance between the base of the clypeus and the insertion of the antennae much greater than the distance between the eye-margin and the insertion of the antennae; first joint of flagellum very slightly longer than the second; eleventh joint of antennae spinose beneath, the spine slightly curved and prominent; joints twelve and thirteen broadly and conspicuously emarginate beneath, joint thirteen strongly acuminate at the apex; distance between the posterior ocelli about equal to the distance between them and the nearest eye-margin; frons and vertex with sparse, shallow punctures; basal half of mandibles, labrum, clypeus, supraclypeal area, eye-margins for about the length of the scape above the insertion of the antennae, scape beneath, pedicel beneath, and first joint of flagellum beneath, all yellow; twelfth and thirteenth joints of antennae beneath obscure yellowish. Thorax black, with long, sparse, silvery hairs; prothorax impunctate; mesonotum, scutellum, metanotum and propodeum with sparse, shallow punctures; mesepisterna more closely and strongly punctured; postero-lateral angles of the propodeum emarginate; spot on the neck, band on pronotum interrupted medially, posterior lobes of pronotum, spot on tegulae, spot on base of wings, spot on mesonotum just in front of tegulae (sometimes almost obsolete), spot at postero-lateral angles of mesonotum, spot on mesepisterna above (sometimes lacking), and spot on postero-lateral angles of propodeum (sometimes lacking), all yellow. Abdomen black, with long, silvery hairs; abdomen with three spines at apex as usual; all the tergites (except the first) with a row of long, stiff, blackish bristles on the posterior margin; sixth sternite broadly emarginate medially on the posterior margin; seventh sternite not longitudinally carinate medially; band on the first tergite, gradually narrowing towards the middle and sometimes interrupted medially, and narrow bands slightly wider medially and suddenly widened at the sides on tergites two, three, four and five, all whitish. Legs black; spot on anterior coxae beneath, apical three fourths of anterior femora beneath and apical third above, tips of intermediate femora above and beneath, all the tibiae except a line behind (the line more extended on the posterior tibiae), all the tarsi (except a spot on the apical joint of the intermediate tarsi, a line behind on the first joint of the posterior tarsi, and the apical joint of the posterior tarsi), all yellowish. Wings hyaline; the marginal cell much shorter than the first submarginal; second submarginal cell not petiolate, but the first and second cubital veins meeting on the radial vein.

♀. Length 9 mm. Differs from the male as follows: Antennae entire, not spinose or emarginate beneath; the scape beneath, pedicel beneath,

and all of the flagellum beneath, all yellowish. Two large spots on scutellum, line on metanotum, and large spots at postero-lateral angles of propodeum, all yellowish. Band on tergite five reduced to medial and lateral spots. Anterior tarsi much flattened; hind tarsi almost entirely black.

Type, a male collected at Bridgeport, Nebraska, July 11, 1917 (C. E. Mickel). Allotype, a female collected at Bridgeport, Nebraska, July 11, 1917 (C. E. Mickel). Two male paratypes and one female paratype collected at Bridgeport, July 11, 1917 (C. E. Mickel).

Related to *nanus,* but differs from that species in the smaller size, the second submarginal cell not petiolate, the distance between the posterior ocelli about equal to the distance between them and the nearest eye-margin, and the tibiæ more or less black.

Subfamily **Bembicinae**

Stictiella corniculata sp. nov.

♂. Length 16 mm. Head black, covered with pale, silvery pubescence; first joint of the flagellum about one third longer than the second; twelfth joint of the antennae about one third longer than the eleventh, slightly incurved; thirteenth joint of the antennae about as long as the tenth and eleventh joints, very strongly arcuate, tapering towards the apex; clypeus, supraclypeal area and inner orbits up to the anterior ocellus, silvery white; labrum, large V-shaped mark bordering the anterior ocellus, scape except a broad line above, pedicel beneath and posterior orbits, all yellowish; flagellum beneath pale, the color varying from yellow at the base to reddish towards the tip. Thorax black, thinly clothed with whitish pubescence; pronotum, except anterior middle and irregular spot in front of posterior lobes, posterior lobes of pronotum, lateral longitudinal line on mesonotum adjacent to the tegulae, spot on tegulae, spot on base of wings, band on the scutellum broadened at the sides and narrowly interrupted medially, band on metanotum, arcuate band on the propodeum above which is broader medially and narrowly, deeply emarginate posteriorly on the median line, large spot covering the sides of propodeum entirely (except a deep emarginate area near the spiracles) and extending onto the posterior face, large spot almost entirely covering the metapleura and with a linear extension running to the posterior coxae, large spot on mesepimeron, mesepisterna entirely except a large spot on the lower posterior half, and mesosternum with an anterior band and wide median line, all yellowish. Abdomen black; second sternite slightly bituberculate; seventh sternite without a discal spine; eighth sternite with three apical

spines; arcuate band on first tergite widest at the sides, broad band on second tergite deeply and very widely emarginate anteriorly, bands on tergites three, four and five, broadly emarginate anteriorly and widened at the sides (less so on the fourth and fifth), sinuous apical band on sixth tergite, apex of seventh tergite, first sternite almost entirely, second sternite entirely except the lateral anterior angles, sinuous apical bands on sternites three, four, five and six, lateral plates of seventh sternite (except outer basal spot) and apex of seventh sternite, apex and spines of eighth sternite, all yellowish. Legs entirely yellow except a line on the trochanters and femora above; intermediate femora serrate beneath; medial metatarsi strongly curved and with three spines within near the base; posterior femora strongly arcuate. Wings hyaline, yellowish near the base.

♀. Unknown.

Type, a male collected at Worland, Wyoming, July 5, 1917 (L. Bruner).

Runs to *pulchella* in Parker's table, but is quite distinct from that species in coloration, form of antennae, and the arcuate posterior femora.

Family **CERCERIDAE**

Cerceris alceste sp. nov.

♀. Length 18 mm. Black, yellow and red. Head with rather long, sparse, grayish pubescence; clypeus very strongly produced, the projection slightly broader than long; very deeply, roundly and broadly emarginate anteriorly, the anterior lateral angles thus appearing as long teeth; sides of projection moderately dentate just before the middle and the sides declivous between the denticle and the base of the projection; area beneath the projection shining, impunctate; clypeal projection, frons, vertex, occiput and genae strongly punctate; ocelli in a very low triangle; first joint of flagellum about one and one half times as long as the second; base of mandibles, lateral spots on clypeus just above the base of the mandibles, clypeal projection (except the margins), frons (except the upper third, the supraclypeal and the interantennal areas), and large spot behind the eyes, all yellowish-white; median area of mandibles, clypeal area below the projection, margins of clypeal projection, spot on the interantennal carina, scape, pedicel, first five joints of flagellum, vertex, occiput and genae, all ferruginous; remainder of head black. Thorax black, with strong, well-separated punctures, and long, sparse, grayish pubescence; enclosed area of propodeum rather finely, longitudinally rugose, with a median impressed line; two large transverse spots on pronotum, tegulae, spot behind the posterior lobes of pronotum, two transverse, contiguous spots on scutellum, metanotum and propodeum (except enclosed area and me-

dian portion of posterior face), all yellowish-white; posterior lobes of pronotum, and borders of the maculations on pronotum, scutellum and propodeum, ferruginous. Abdomen ferruginous; strongly punctate; pygidium about two and one fourth times as long as wide, narrowed and roundly truncate at the tip, transversely rugose, and the lateral margins with a row of stiff hairs; broad band on first tergite, emarginate anteriorly and posteriorly, broad bands on tergites two, three, four and five, very much narrowed medially, all whitish-yellow; basal portion of tergites two, three, four and five, black. Legs entirely ferruginous. Wings reddish-yellow, apices and marginal cell darkened; stigma ferruginous.

♂. Unknown.

Type, a female collected at Mitchell, Nebraska, August 4, 1916 (C. E. Mickel).

A very distinct species and easily recognized by the form of the clypeal projection and the ferruginous and yellow color.

Cerceris alacris sp. nov.

♀. Length 13 to 14 mm. Head black, with very sparse, grayish pubescence; frons with close, strong, more or less contiguous punctures; vertex and genae with the punctures well separated; clypeal projection with a free apical edge, about one and one half times as broad as long, the upper surface strongly convex; ocelli in a moderately low triangle; first joint of flagellum about one and one half times as long as the second; mandibles except the tips, clypeus (except a spot on the anterior middle beneath the projection and the anterior border of the projection), supraclypeal area and interantennal carina, sides of the frons up to a little more than half way to the top of the eyes, scape beneath, two minute spots beneath the posterior ocelli and two large spots behind the eyes, all yellowish; flagellum ferruginous, joints six to eight blackish above. Thorax with strong, well-separated punctures and very sparse pubescence; enclosure of propodeum dullish, with a median impressed line and striate at the base and sides; band on pronotum slightly interrupted medially, tegulae, spot on dorsal plate of mesepisterna, band on scutellum emarginate medially posteriorly, metanotum, and two large spots on propodeum, almost covering the sides and the posterior face, all yellowish; spots on the propodeum margined with ferruginous. Abdomen black, with strong, well-separated punctures; pygidium about twice as long as wide, roundly truncate and somewhat narrowed apically, rugoso-punctate; first tergite with a broad yellow band, emarginate medially anteriorly and posteriorly, second tergite with very broad apical band, all yellowish; bands on tergites three, four and five much narrowed medially and widened at the sides, all whitish; ground color of first segment, and second sternite, ferruginous. Legs ferruginous; apical two thirds of anterior and intermediate femora,

basal half of posterior femora anteriorly, anterior and intermediate tibiae, and posterior tibiae anteriorly, all yellowish. Wings subhyaline, darker at the apex; stigma ferruginous.

♂. Unknown.

Type, a female collected at Mitchell, Nebraska, July 21, 1916 (C. E. Mickel). One paratype, Mitchell, Nebraska, July 20, 1916 (C. E. Mickel).

The paratype differs from the type as follows: no spots behind the ocelli; no spots on dorsal plate of mesepisterna; two spots on scutellum; spots on propodeum somewhat reduced; and scarcely any ferruginous on the abdomen.

May be readily recognized by the ferruginous legs, maculations of propodeum and the form of the clypeal projection.

Cerceris fugatrix sp. nov.

♂. Length 20 to 21 mm. Black, moderately punctured, with long, thin, cinereous pubescence. Clypeus broadly tridentate, somewhat flattened, with strong, well-separated punctures on the margins, but almost impunctate medially; hair lobes about twice their breadth apart; frons above the insertion of the antennae with large, strong, almost contiguous punctures; the area behind the ocelli and the genae with the punctures well separated; a median impressed line on the frons running from the anterior ocellus almost to the interantennal carina; ocelli in a very low triangle; first joint of flagellum about one and one third times as long as the second, joints seven to ten somewhat thickened, the last joint curved and somewhat acuminate; mandibles except the tips, clypeus, supraclypeal area and interantennal carina, frons entirely at the sides up to a point about the length of the scape above the insertion of the antennae, scape beneath, and a small spot behind the eyes, all pale yellow; scape above, pedicel and flagellum (except joints seven to ten) ferruginous; joints seven to ten of flagellum more or less piceous. Thorax strongly punctured; the punctures on the posterior and lateral faces of the propodeum especially strong and well separated; enclosure of propodeum longitudinally striate on the basal half and at the sides, with a very deep median impressed line; large lateral spots on pronotum (widely separated), tegulae, metanotum and large spot on postero-lateral angles of propodeum, all pale yellow. Abdomen, with strong, well-separated punctures; pygidial area slightly wider at the tip than at the base, rounded at the tip, about one and two thirds times as wide as long; lateral apical spots on tergite one, wide apical bands on tergites two to six (somewhat narrowed medially), basal half of tergite seven, large lateral spots, joined on the apical margins, of sternites two to four, and small lateral spots on sternite five, all pale yellow. Anterior

and intermediate coxae black; posterior coxae yellow beneath, anterior trochanters blackish ferruginous; intermediate and posterior trochanters yellowish; femora, all yellowish (except anterior and intermediate ones behind more or less ferruginous to piceous, and posterior ones ferruginous at the tips); anterior and intermediate tibiae and tarsi yellow; posterior tibiae and tarsi yellowish in front, ferruginous behind. Wings yellowish, darker at the tips; stigma ferruginous.

♀. Unknown.

Type, a male collected at Mitchell, Nebraska, August 4, 1916 (C. E. Mickel).

May be recognized by the yellowish wings, ferruginous and yellow legs, the large size, and the maculation of the propodeum. This may possibly prove to be the male of *alceste*.

Cerceris varians sp. nov.

♀. Length 10 to 12 mm. Black, strongly punctured. Clypeus produced; the projection with a free apical edge but broader than long, the apex narrower than the base, upper surface convex, anterior margin very broadly and shallowly emarginate; first joint of the flagellum about one and one half times as long as the second; ocelli in a low triangle; frons above the antennae finely, longitudinally striate, interspersed with large, shallow, elongate punctures; mandibles at the base, clypeal projection above except the apical margin, lateral spots on clypeus, supraclypeal spot which extends onto the interantennal carina, very broad lateral marks on the frons extending a short distance above the insertion of the antennae, spot on scape beneath, and spot behind the eyes, all yellowish; flagellum ferruginous beneath, black above. Thorax strongly punctured, rather dull; enclosure of propodeum strongly longitudinally striate, the apex of the enclosure with a few transverse striae; small lateral spots on pronotum, tegulae, metanotum, and an elongate spot on the postero-lateral angles of the propodeum, all yellowish. Abdomen strongly punctate; pygidial area broadest at the base, rounded at the tip, about two and one half times as long as it is wide at the base, rugose with a few punctures at the base; lateral spots on tergite one, apical bands narrowed medially and broadened laterally on tergites two to five, small lateral spots on sternite two, and large lateral spots on sternites three and four, all yellowish. Coxae and trochanters black; all the femora yellow except large, irregular, basal areas on the anterior and intermediate femora, and the tips of the posterior femora black; tibiae yellow, except apices of posterior ones black; anterior and intermediate tarsi reddish; posterior tarsi blackish. Wings subhyaline, darker in the marginal cell and at the tips; stigma reddish yellow.

♂. Length 10 mm. Differs from the female as follows: no projection on clypeus, anterior margin sinuate; clypeus and supraclypeal area en-

tirely yellow; scape entirely yellow beneath; apical joint of antennae curved; propodeal enclosure not so strongly striate; narrow apical band on tergite six, slightly interrupted medially, yellow; pygidial area slightly wider at the apex than at the base, rectangular, about twice as wide as long, punctate; large lateral spots on sternite two; minute lateral spots on sternite five; intermediate coxae beneath, intermediate trochanters, and posterior coxae and trochanters, yellow.

Type, a female collected at Donner Lake, Placer county, California, August 24, 1916 (L. Bruner). Allotype, a male collected at Lake Tahoe, California, August 21, 1916 (L. Bruner). Two female paratypes collected at Donner Lake, Placer county, California, August 24, 1916 (L. Bruner), four female paratypes collected at Lake Tahoe, August 23, 1916 (L. Bruner), and one male paratype collected at Donner Lake, Placer county, California, August 24, 1916 (L. Bruner).

The sculpture of the propodeal enclosure varies considerably in the female paratypes, in some it is strongly longitudinally striate as in the type while in others the enclosure is dull and only striate at the sides. The maculation of the body also varies; in one there are no spots on the pronotum, sometimes there are only two small spots on the metanotum, sometimes the propodeum is immaculate, in one paratype the band on the second segment is interrupted, often the band on the fourth tergite is interrupted forming large lateral spots, in one paratype the fifth tergite is immaculate; the amount of yellow on the sternites, and black on the posterior femora also varies.

May be recognized by the shape of the clypeal projection together with the sculpture of the frons, and the maculation of the body although the variations of the latter must be taken into account.

Cerceris munda sp. nov.

♀. Length 11 mm. Black, strongly punctured. Clypeal projection with a free apical edge, the projection twice as broad as long, convex above, broadly, shallowly and angulately emarginate on the anterior margin; anterior margin of the clypeus with a strong tooth immediately below the lateral angles of the projection; frons above the antennae finely, longitudinally striate, interspersed with moderate, elongate punctures; ocelli in a moderately low triangle; first joint of flagellum about one and one third times as long as the second; mandibles except the tips, clypeal pro-

jection except the margins, lateral spots on clypeus, spot on supraclypeal area extending onto the interantennal carina, broad lateral areas on the frons extending up above the insertion of the antennae, and spot behind the eyes, all yellow; flagellum beneath reddish, above black. Thorax strongly punctate; the mesepisterna with large, more or less contiguous punctures, thus appearing reticulate; scutellum sparsely punctured; enclosure of propodeum strongly longitudinally striate; widely separated lateral spots on pronotum, tegulae, metanotum, and elongate spot at the postero-lateral angles of the propodeum, all yellow. Abdomen strongly punctured; pygidial area widest at the base, narrowed and rounded at the apex, about two and one fourth times as long as wide, a few punctures at the base, transversely rugose; lateral spots on tergite one, tergites two to five entirely except a median, basal, semicircular area, and lateral spots on sternites two to four, all yellow. Legs black; apices of anterior and intermediate femora, basal three fourths of posterior femora in front and basal half behind, anterior and intermediate tibiae and tarsi, and posterior tarsi except the tips, all yellow. Wings subhyaline, darker at the tips, stigma reddish.

♂. Length 9 mm. Differs from the female as follows: no clypeal projection; clypeus, supraclypeal and interantennal areas entirely yellow; scape yellow beneath; propodeum not maculated; tergites with yellow bands narrowed medially and broadened at the sides; spots connected apically on sternites two to four; sternite five with small lateral spots; legs yellow, except anterior coxae, trochanters and femora behind, intermediate femora behind basally, posterior femora apically, posterior tibiae apically, and posterior tarsi, all of which are black.

Type, a female collected at Sacramento, California, October 6, 1916 (L. Bruner). Allotype, a male collected at Sacramento, California, October 3, 1916 (L. Bruner).

May be distinguished by the form of the clypeal projection and the extensive yellow maculations of the abdomen.

Cerceris pudorosa sp. nov.

♀. Length 9 to 10 mm. Black, strongly punctured, very sparsely pubescent. Clypeus produced, with a free apical edge, the projection low but extending beyond the anterior margin of the clypeus, roundly emarginate medially; clypeus laterally with silvery white pubescence; a raised line running from interantennal carina to anterior ocellus; frons very strongly and closely punctured; ocelli in a low triangle; first joint of flagellum about one and one half times as long as the second; basal half of mandibles, clypeus except apical margin of projection, supraclypeal dot, broad lateral marks on frons extending up a little beyond the insertion of the antennae, scape beneath, and dot behind the eyes, all pale yellow; flagellum reddish yellow beneath, black above. Mesonotum and

scutellum rather sparsely punctured; mesepisterna with strong close punctures, and produced medially below, forming a very strong, blunt tooth; enclosure of propodeum mostly smooth, dull, with a median impressed line and slightly obliquely striate at the sides; sides of propodeum longitudinally striate; posterior face of propodeum with strong, close punctures; large lateral spots on pronotum, tegulae, spot on dorsal plate of mesepisterna, spot on mesepisterna at the projection, two spots on scutellum, and metanotum, all pale yellow. Abdomen strongly and closely punctured; pygidial area pyriform, about three times as long as it is wide at the base, punctured basally, and with a row of stiff, brownish hairs on the lateral margins; median apical spot on first tergite, broad band on second tergite somewhat narrowed medially, rather narrow apical bands much broadened laterally on tergites three and four, and band slightly narrowed medially on tergite five, all yellow. Legs black; apices of all the femora, anterior and intermediate tibiae except a spot behind, posterior tibiae except apical third, and anterior and intermediate tarsi, all pale yellow; posterior tarsi black except the first joint in front pale yellow. Wings subhyaline, darker at the apex and in the marginal cell; stigma piceous.

♂. Length 7.5 mm. Differs from the female as follows: clypeus without a projection, tridentate medially on the anterior margin; only a median yellow spot on the clypeus; no supraclypeal dot; no spots behind the eyes; mesepisterna not produced into a tooth; propodeal enclosure entirely smooth, shining; no spot on mesepisterna or on the dorsal plate of the mesepisterna; pygidial area about twice as long as it is wide at the base, strongly punctate; darkened portion of wings with a violaceous reflection, more so than in the female.

Type, a female collected at Auburn, California, on September 20, 1916 (L. Bruner). Allotype, a male collected at the same time and place.

Runs to *convergens* in Viereck and Cockerell's table, but the mesepisterna of the female are produced, the markings are distinctly yellow, not whitish, the pygidium is not constricted before the apex, and evidently the structure of the clypeal projection is not the same as in *convergens*.

Cerceris minax sp. nov.

♀. Length 8 to 9 mm. Black, strongly punctured, sparsely pubescent. Clypeus produced anteriorly, forming a slightly raised free apical edge; frons strongly and closely punctate, with a raised line running from the interantennal carina to the anterior ocellus; first joint of flagellum about one and one third times as long as the second; ocelli in a low triangle; basal two thirds of mandibles, clypeus except the apical margin of the

projection and the area beneath the projection, supraclypeal and interantennal areas, broad lateral marks on frons extending up a little beyond the insertion of the antennae, scape beneath, flagellum beneath and spot behind the eyes, all pale yellow. Mesonotum and scutellum rather sparsely punctate; mesepisterna with large, close punctures, produced below medially, forming a small, blunt tooth; propodeal enclosure finely transversely rugose with a median impressed line; posterior face of propodeum with large, close punctures; lateral faces of propodeum finely longitudinally striate; large lateral spots on pronotum, tegulae, spot on dorsal plate of mesepisterna, two spots on scutellum, and metanotum, all pale yellow. Abdomen with strong, rather close punctures; pygidial area pyriform, about three times as long as it is wide at the base, much narrowed before the apex, more or less rugose basally; band on tergite one, broad band narrowed medially on tergite two, tergites three and four entirely except a median semicircular area anteriorly, broad band on tergite five narrowed medially, and lateral spots on sternites three and four, all yellow. Legs black; apical half of all the femora, all the tibiae except a spot behind at or near the apex, anterior and intermediate tarsi, and basal joint of hind tarsi all yellowish. Wings subhyaline, darker at the apex and in the marginal cell; stigma testaceous.

♂. Length 6 to 7 mm. Differs from the female as follows: clypeus tridentate anteriorly, without a projection; no spot behind the eyes; no spot on dorsal plate of mesepisterna; mesepisterna not toothed; pygidial area a little more than twice as long as it is wide at the base, with a few punctures, truncate at the apex.

Type, a female collected at Sacramento, California, October 3, 1916 (L. Bruner). Allotype, a male collected at Sacramento, California, October 6, 1916 (L. Bruner). One female paratype, Auburn, California, August 12, 1916 (L. Bruner); one female paratype, Auburn, California, August 14, 1915 (L. Bruner); two female paratypes, Auburn, California, September 20, 1916 (L. Bruner); one male paratype, Sacramento, California, September 18, 1916 (L Bruner) and one male paratype, Auburn, California, August 12, 1916 (L Bruner).

Also runs to *convergens* in Viereck and Cockerell's table, but the markings are distinctly yellow, the propodeal enclosure is transversely rugose (not smooth, dull, striatulate at the sides), the pygidial area is not constricted and the stigma is testaceous, not piceous as in *convergens*.

Cerceris complanata sp. nov.

♀. Length 8 mm. Black, strongly punctured, sparsely pubescent. Clypeus

without a projection having a free apical edge, the median basal portion very convex, almost forming a cone, and apical margin with two large very blunt teeth; frons strongly and closely punctate, with a raised line running from the interantennal carina to the anterior ocellus; ocelli in a low triangle; first joint of flagellum about one and one half times as long as the second; large spot on median basal portion of clypeus, small spot on supraclypeal area, broad lateral marks on frons extending up a little beyond the insertion of the antennae, scape beneath, minute dot on raised line of frons, and spot behind the eyes, all yellow; flagellum reddish above, yellowish beneath. Thorax with large, close punctures throughout; mesepisterna produced below forming a blunt tooth; propodeal enclosure coarsely, transversely striate (tending to obliquely striate at the base); large lateral spots on pronotum, tegulae, major portion of dorsal plate of mesepisterna, two large spots on scutellum, metanotum, and large, elongate spots on postero-lateral angles of propodeum, all yellow. Abdomen with large dense punctures; pygidium pyriform, about four times as long as it is wide at the base, about as wide at the tip as at the base, subtruncate apically, slightly transversely rugose; apical band on first tergite, broad band very deeply emarginate on tergite two, bands on tergites three and four much narrowed medially and broadened at the sides to cover the whole tergite, and apical band on tergite five, all yellow. Anterior femora flattened, excavated behind; anterior tibiae somewhat flattened; legs black; apical half of anterior femora, apices of intermediate and posterior femora, anterior and intermediate tibiae except a spot behind, posterior tibiae except the apices, all yellow; all the tarsi more or less reddish, the posterior ones darkly so. Wings subhyaline, darker in the marginal cell and at the apex; stigma piceous.

♂. Length 7 to 8 mm. Differs from the female as follows: clypeus entirely, supraclypeal area, interantennal area and the raised line to the anterior ocellus, broad lateral marks on the frons as in the female, all yellow; apices of the mandibles bright red; first joint of the flagellum but slightly longer than the second; clypeus as usual in the males; mesepisterna not toothed; no spot on postero-lateral angles of propodeum; pygidial area somewhat pyriform, punctured; anterior femora and tibiae normal, not flattened; otherwise as in the female.

Type, a female collected at Auburn, California, September 20, 1916 (L. Bruner). Allotype, a male collected at Auburn, California, September 20, 1916 (L. Bruner). Two male paratypes collected at the same time and place. One male paratype collected at Auburn, July 15, 1916 (L. Bruner).

May be readily recognized by the flattened and excavated anterior femora, the toothed mesepisterna, the structure of the clypeus and the maculation of the thorax.

II.—A SYNOPSIS OF THE SPHECOIDEA OF NEBRASKA (HYMENOPTERA)

BY CLARENCE E. MICKEL

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The following paper is the result of three years more or less intermittent study and collecting of the entomophilous wasps of the superfamily Sphecoidea. In 1908, Mr. H. S. Smith published a list of Nebraska Sphecoidea together with synoptic tables, descriptions of new species and notes. The University of Nebraska collection of this group has more than doubled in size since 1908, the collection of Nebraska specimens now numbering about 7,000, while the entire collection of Sphecoidea includes between 8,000 and 9,000 specimens. This wealth of material has naturally increased the number of species known to occur within the state and has furnished 91 species new to science. Mr. H. S. Smith's paper included 200 species of Nebraska Sphecoidea, while the collection now contains 349 species of this group taken within the state. It seems opportune, therefore, to now publish a complete account of our knowledge concerning the Nebraska Sphecoidea. No doubt other forms will be found from time to time, and it is hoped that the synopsis here presented will stimulate interest in the study of this group and aid the student in determining the specimens that come to hand. The writer has been materially assisted by an abundance of comparative material.

The Sphecoidea are one of the most interesting groups of the Hymenoptera, both from an economic and taxonomic standpoint. Except in one or two instances the habits of these wasps are of considerable economic value to man. The Peckhams have given an interesting account of the habits of several species. The adult wasps provision their nests with other insects, most of which are more or less destructive These include Lepidopterous larvae, Homoptera, Hemiptera, Diptera and Coleoptera.

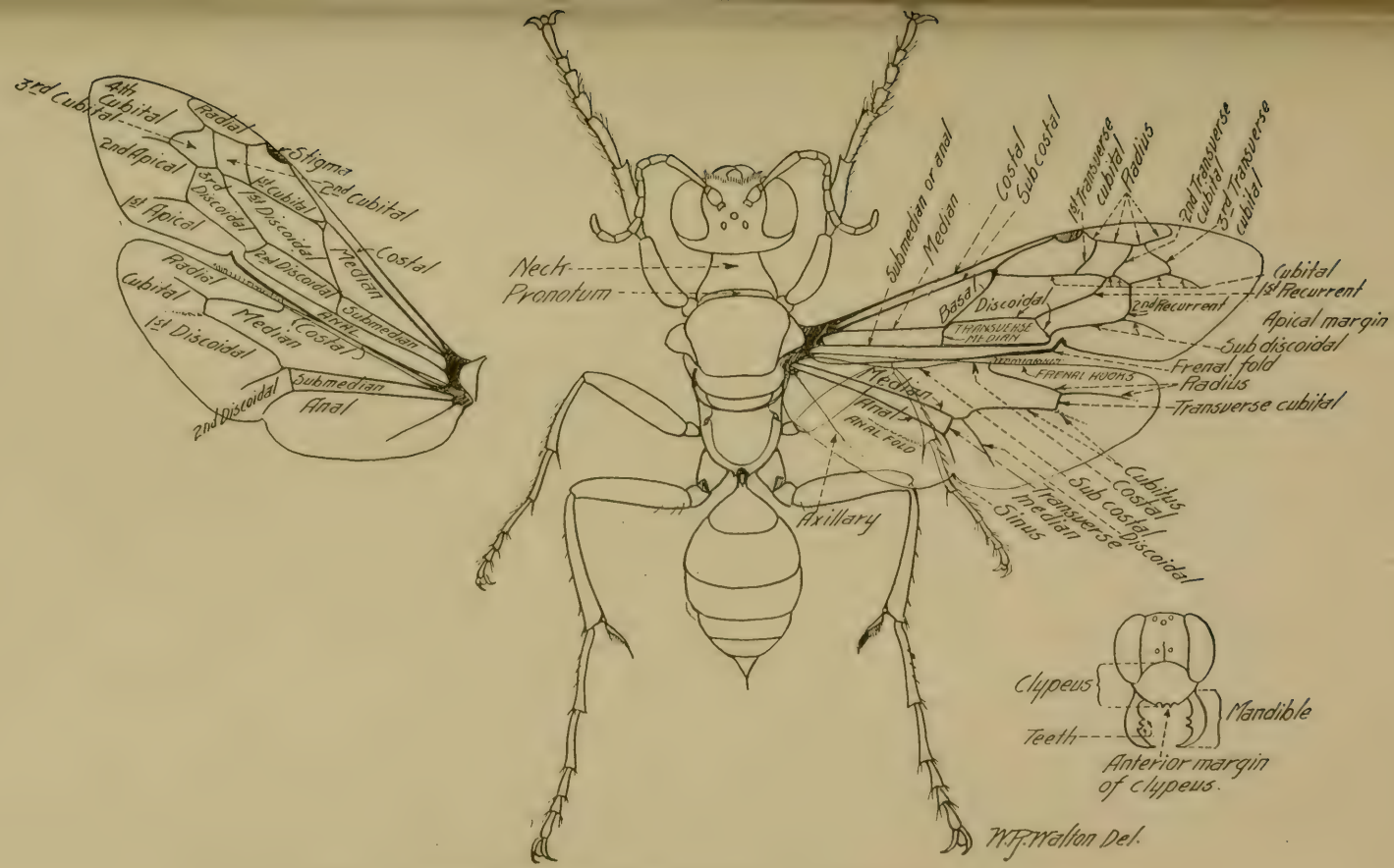

FIG. 1. *Chlorion (Ammobia) ichneumoneum.* [After Rohwer, *Hymen. of Conn.*]

The writer in the main has followed the classification proposed by Rohwer in the Hymenoptera of Connecticut. This classification seems to be the most natural yet proposed for this superfamily of Hymenoptera, since it brings together groups which are obviously closely related and yet have been widely separated in current former classifications. It also has the advantage of being more workable and less cumbersome than those formerly proposed.

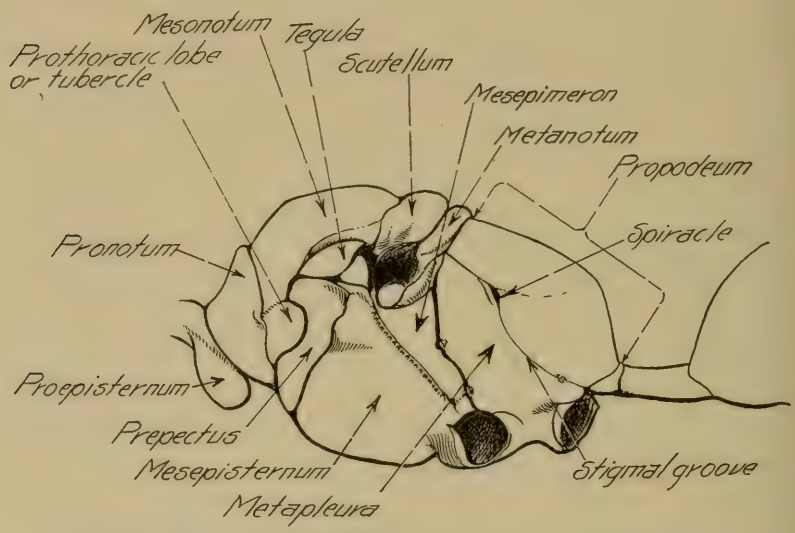

Fig. 2. Thorax of *Chlorion* (*Ammobia*) *ichneumoneum*. [After Rohwer, *Hymen. of Conn.*]

The synonymical notes include only the reference to the original description, the latest monographic reference, if any is available, and in a few cases other important synonymy. Under each species is given the total number of male and female specimens in the collection which have been taken within the state. The various localities are also cited, together with the number of specimens from each locality. In almost every case the earliest and latest seasonal date is given, as well as the names of the flowers visited.

I am indebted to Professors Lawrence Bruner, Myron H.

Swenk and R. W. Dawson for encouragement and suggestions received during the course of the work. Acknowledgment should also be made to the writings of Mr. William J. Fox, Mr. H. T. Fernald, Dr. Nathan Banks, Mr. S. A. Rohwer and Mr. J. B. Parker, since these writings contributed largely toward the synoptic tables.

KEY TO THE FAMILIES

1. Prepectus present .....SPHECIDAE
   Prepectus wanting 2
2. Antennae inserted close to clypeus; cheeks narrow; first abdominal segment not narrower than second; lower posterior margin of propodeum angled due to metathoracic pleural suture being dorsoventral; no dorsal plate to mesepisternum .....BEMBICIDAE
   Antennae inserted much above clypeus; cheeks broad; first abdominal segment much narrower than second; lower posterior margin of propodeum rounded due to metathoracic pleural suture being curved; a dorsal plate to mesepisternum .....CERCERIDAE

SPHECIDAE

KEY TO THE SUBFAMILIES

1. Prepectal suture originating below lower margin of prothoracic tubercule, prepectus therefore wanting between tubercule and tegulae, NYSSONINAE
   Prepectal suture originating posterior to prothoracic tubercule, prepectus therefore present between tubercule and tegula 2
2. Prepectus defined posteriorly by a strong carina which is angulate opposite prothoracic tubercule; an oblique suture from below tegula to sternum, where it joins prepectal carina 3
   Prepectus defined posteriorly by a suture; no suture from below tegula to prepectal suture 5
3. Antennae inserted near middle of face; mesepisternum with a dorsal and ventral plate; abdomen petiolate; wings with three cubital cells, PSENINAE
   Antennae inserted very close to dorsal margin of clypeus; mesepisternum without a dorsal plate; abdomen sessile, or subsessile; wings with one cubital cell 4
4. First cubital and first discoidal cells confluent; propodeum with a process at dorsal middle; metanotum with processes at sides; eyes with their inner margins subparallel .....OXYBELINAE
   First cubital and first discoidal cells separate; propodeum and metanotum without processes; eyes with their inner margins strongly converging below .....CRABRONINAE

5. Abdomen with a strong constriction between first and second ventral segments 6
   Abdomen without a constriction between first and second ventral segments 8
6. Clypeus with a lobe at dorsal middle; antennae inserted well above clypeus near middle of face; intermediate tibiae with two apical spurs ..... PHILANTHINAE
   Clypeus with dorsal margin nearly straight; antennae inserted very close to dorsal margin of clypeus, much below middle of face.. 7
7. Inner margins of eyes deeply emarginate; intermediate tibiae with one apical spur ..... TRYPOXYLONINAE
   Eyes at most reniform, mesal margins subparallel; intermediate tibiae with two apical spurs ..... MELLININAE
8. Intermediate coxae without a transverse suture near base; propodeum long, with spiracles well removed from base; abdomen with a long petiole; intermediate tibiae with two apical spurs ..... SPHECINAE
   Intermediate coxae with a transverse suture near base; propodeum shorter, and with spiracles close to metanotum; abdomen usually sessile, but, when petiolate, intermediate tibiae have only one spur.. 9
9. Metasternum with a large process which is deeply emarginate ventrally; intermediate tibiae with one apical spur; wings with three cubital cells; radial cell with an appendage ..... LARRINAE
   Metasternum without a large, deeply emarginate process 10
10. Abdomen depressed, dorsal surface flattened; intermediate tibiae with two apical spurs; radial cell truncate; wings with three cubital cells, ASTATINAE
    Abdomen cylindrical or in a very few cases subdepressed, dorsal surface convex; intermediate tibiae with one apical spur; venation various ..... PEMPHREDONINAE

NYSSONINAE

KEY TO THE TRIBES

1. Mesepisternum without a dorsal plate; lateral dorsal angles of propodeum dentate or sharply angulate; second cubital cell petiolate, *Nyssonini*
   Mesepisternum with a dorsal and ventral plate; propodeum not dentate 2
2. Second pleural suture strongly angulate, mesepimeron therefore much broader above; pronotum long, cephalo-caudal length approximating same length of scutellum; slender insects; second cubital cell petiolate ..... *Alysonini*
   Second pleural suture straight or nearly so, mesepimeron therefore nearly parallel-sided; pronotum transverse; stout species; second cubital cell sessile 3

3. Sternauli wanting; mesepisternum with an oblique suture from below tegulae to prepectal carina ..... *Gorytini*
   Sternauli present; mesepisternum without an oblique suture from below tegulae to prepectal carina ..... *Hoplisini*

Alysonini

KEY TO THE GENERA

Submedian cell of anterior wings a little shorter than the median on the median nervure; abdomen with a pale spot on each side of the second dorsal segment ..... *Alyson*

Submedian cell of anterior wings much longer than the median on the median nervure; abdomen without a pale spot on each side of the second dorsal segment ..... *Didineis*

Alyson Jurine

KEY TO THE SPECIES

1. Median area of propodeum triangular; at least first abdominal segment, and usually part of second, in male red, in female black; clypeus yellow, legs reddish ..... *triangulifer*
   Median area of propodeum not triangular, usually U-shaped 2
2. Thorax red; legs except hind tibiae, red..... *melleus*
   Thorax black 3
3. Median area of propodeum coarsely reticulated; two basal segments of abdomen red, female; abdomen black, male ..... *oppositus*
   Median area of propodeum not at all reticulated; abdomen black in both sexes 4
4. Clypeus entirely yellow; median area of propodeum with numerous longitudinal radiating ridges ..... *radiatus*
   Clypeus yellow, black medially, or entirely black; median area of propodeum of male with two diverging, central, longitudinal ridges. *conicus*

Alyson triangulifer Provancher.

1887. *Alyson triangulifer* Provancher, *Additions a la Faune du Canada, Hymen.*, p. 272.
1894. *Alyson triangulifer* Fox, *Ent. News*, V, p. 89.

Males 4, females 3: Omaha (1), Lincoln (1), West Point (3), Broken Bow (1) and Glen (1); June 24 to October 2.

Alyson melleus Say.

1837. *Alyson melleus* Say, *Bost. Journ. Nat. Hist.*, I, p. 380.
1859. *Alyson melleus* Say, *Leconte edition*, II, p. 762.
1894. *Alyson melleus* Fox, *Ent. News*, V, p. 87.

Females 11: Omaha (6), Lincoln (1), West Point (2), Maskell (1) and Glen (1); June 26 to August 18.

Alyson oppositus Say.

1837. *Alyson oppositus* Say, *Bost. Journ. Nat. Hist.*, I, p. 380.
1894. *Alyson oppositus* Fox, *Ent. News*, V, p. 87.

Females 5: Omaha (1), Mitchell (1), Monroe Canyon (2) and Glen (1); August 6 to August 19.

Alyson radiatus Fox.

1894. *Alyson radiatus* Fox, *Ent. News*, V, p. 87.
1908. *Alyson radiatus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 341.

Females 2: West Point; June.

Alyson conicus Provancher.

1887. *Alyson conicus* Provancher, *Additions a la Faune du Canada, Hymen.*, p. 271.
1894. *Alyson conicus* Fox, *Ent. News*, V, p. 88.

Males 4: Monroe Canyon, August 3, 1908 (R. W. Dawson).

Didineis Wesmael

Didineis texana (Cresson).

1872. *Alyson texanus* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 226.
1894. *Didineis texana* Fox, *Ent. News*, V, p. 127.

Males 1, females 1: Lincoln (1), September 8, 1899; Mitchell (1), September 6, 1916.

Nyssonini

KEY TO THE GENERA

1. Cubitus in hind wings originating before the transverse median nervure or interstitial with it; hind tibiae usually spinous, but not serrate on hind margin; scutellum normal; apex of abdomen of male terminating in two teeth ..... *Nysson*
   Cubitus in hind wings originating beyond the transverse median nervure 2
2. Hind tibiae strongly serrated on the hind margin, and also more or less spinous; lateral margins of scutellum more or less strongly reflexed, the metanotum bilobed; apex of male abdomen terminating in four teeth ..... *Paranysson*
   Hind tibiae with feeble spines, never serrate; lateral margins of scutellum more or less margined, the metanotum normal; apex of abdomen of male terminating in two teeth ..... *Brachystegus*

Nysson Latreille

KEY TO THE SPECIES

1. Females 2
   Males 5
2. Basal segment of abdomen red; size small, 5–6 mm. long ...*rufiventris*
   Abdomen not at all red 3
3. Scutellum not margined laterally, but strongly and closely punctured; puncturation of head and mesonotum very close; spots on first abdominal segment same size as those on remaining segments, *fidelis*
   Scutellum faintly margined laterally, covered with large, sparse, shallow punctures; spots on the first abdominal segment the largest 4
4. Pygidial areas broad, subtruncate at tip, with large somewhat confluent punctures; spots on first abdominal segment almost covering the entire segment; size large, 11–13 mm. .....*plagiatus*
   Pygidial area narrower, rounded at tip, longitudinally rugoso-punctate; spots on first abdominal segment transverse, confined to apical portion of segment .....*aequalis*
5. Last dorsal segment ciliated between the teeth 6
   Last dorsal segment not ciliated between the teeth, length 5–6 mm. 8
6. Last dorsal segment not prominent between the teeth, subtruncate; lateral spots on the first dorsal segment large, covering almost the entire segment .....*plagiatus*
   Last dorsal segments prominently angulate between the teeth; spots on the first segment transverse, confined to apical portion of segment 7
7. Size large, 10–11 mm.; tubercles, pronotum and scutellum yellow, scape and femora entirely ferruginous; ventral punctures deep ...*aequalis*
   Size smaller, 7–8 mm.; tubercles, pronotum and scutellum without yellow markings; scape, and anterior and intermediate femora piceous; ventral punctures shallow .....*angularis*
8. Abdomen reddish, at least basally .....*rufiventris*
   Abdomen not at all reddish .....*simplicicornis*

Nysson rufiventris Cresson.

1882. *Nysson rufiventris* Cresson, *Trans. Amer. Ent. Soc.*, IX, p. 283.
1896. *Nysson rufiventris* Fox, *Journ. New York Ent. Soc.*, IV, p. 15.

Males 5, females 13: Mitchell (1), Harrison (5) and Glen (12); June 27 to August 21; visits flowers of *Helianthus* sp. and *Cleome serrulata*.

Nysson simplicicornis Fox.

1896. *Nysson simplicicornis* Fox, *Journ. New York Ent. Soc.*, IV, p. 15.

1908. *Nysson simplicicornis* H. S. Smith, Univ. Nebr. Studies, VIII, p. 340.

Males 2: Glen, August 20, 1906 (H. S. Smith).

Nysson plagiatus Cresson.

1882. *Nysson plagiatus* Cresson, *Trans. Amer. Ent. Soc.*, IX, p. 276.
1896. *Nysson plagiatus* Fox, *Journ. New York Ent. Soc.*, IV, p. 13.

Males 6, females 9: Omaha (9), Louisville (2), West Point (1), Haigler (1) and Glen (2); July 14 to August 30; visits flowers of *Chamaecrista fasciculata.*

Nysson aequalis Patton.

1879. *Nysson aequalis* Patton, *Can. Ent*, XI, p. 212.
1896. *Nysson aequalis* Fox, *Journ. New York Ent. Soc.*, IV, p. 13.

Males 3, females 2: Omaha (2), South Sioux City (1) and West Point (2); July 11 to August 13; visits flowers of *Melilotus alba.*

Nysson angularis H. S. Smith.

1908. *Nysson angularis* H. S. Smith, Univ. Nebr. Studies, VIII, p. 340.

Males 7: Omaha (5) and West Point (2); July 31 to August 28; visits flowers of *Solidago rigida* and *Chamaecrista* sp.

Originally described from the two specimens taken at West Point, the Omaha material having been collected since.

Nysson fidelis Cresson.

1882. *Nysson fidelis* Cresson, *Trans. Amer. Ent. Soc.*, IX, p. 282.
1896. *Nysson fidelis* Fox, *Journ. New York Ent. Soc.*, IV, p. 15.

Males 4, females 1: Monroe Canyon (1), Sowbelly Canyon (3) and Warbonnet Canyon (1); June 23 to August 19.

Paranysson Guerin

Paranysson texanus (Cresson).

1872. *Nysson texanus* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 223.
1896. *Nysson texanus* Fox, *Journ. New York Ent. Soc.*, IV, p. 12.

Males 3, females 9: Omaha (2), South Bend (1), Ogallala (1), Mitchell (1), Harrison (1), Glen (5) and Monroe Canyon (1); June 24 to August 21; visits flowers of *Chamaecrista fasciculata.*

Brachystegus Costa

KEY TO THE SPECIES

1. Abdomen entirely black 2
   Abdomen more or less red 3
2. Legs reddish, species 8–10 mm. .....*mellipes*
   Legs black, species 4–5 mm. .....*maculipes*
3. Abdomen entirely red .....*metathoracicus*
   Abdomen in part black 4
4. First three abdominal segments with yellow bands; legs red; pronotum and scutellum marked with yellow .....*bellus*
   Abdominal segments without bands; with a yellow lateral spot on each segment; legs blacker; pronotum and scutellum entirely black. *trichrus*

Brachystegus mellipes (Cresson).

1882. *Nysson mellipes* Cresson, *Trans. Amer. Ent. Soc.*, IX, p. 279.
1896. *Nysson mellipes* Fox, *Journ. New York Ent. Soc.*, IV, p. 15.

Males 3, females 2: Omaha (2), Lincoln (1) and Glen (2); July 14 to August 21; visits flowers of *Chamaecrista fasciculata.*

Brachystegus maculipes Mickel.

1916. *Brachystegus maculipes* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 400.

Females 4: Omaha (4); June 15 and 26.

Brachystegus metathoracicus H. S. Smith.

1908. *Brachystegus metathoracicus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 338.

Females 2: Glen (2); August 20 and 21.

Brachystegus bellus (Cresson).

1882. *Nysson bellus* Cresson, *Trans. Amer. Ent. Soc.*, IX, p. 280.
1896. *Nysson bellus* Fox, *Journ. New York Ent. Soc.*, IV, p. 16.

Females 2: Glen, August 20, 1906 (H. S. Smith); Mitchell, July 28, 1917 (C. E. Mickel).

Brachystegus trichrus Mickel.

1916. *Brachystegus trichrus* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 400.

Females 2: Omaha (2); July 5, 1913 (L. T. Williams), and August 18, 1914 (L. T. Williams).

GORYTINI

Euspongus LePeletier

Euspongus bipunctatus (Say).

1824. *Gorytes bipunctatus* Say, *Narr. Exped. St. Peter's River* (*Keating*), II, Zoöl, p. 338.
1895. *Gorytes bipunctatus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 523.
1912. *Paramellinus bipunctatus* Rohwer, *Proc. U. S. Nat. Mus.*, XLI, p. 469.

Males 1, females 11: Rulo (1) and Omaha (11); June 26 to July 23; visits flowers of *Chamaecrista fasciculata* and *Melilotus alba*.

HOPLISINI

KEY TO THE GENERA

1. Cubitus in hind wings originating far before the transverse median nervure; triangular area of propodeum sharply defined by grooved lines, the enclosure smooth, polished, not striate, or at most only slightly striate laterally at base ..... *Pseudoplisus*
   Cubitus in hind wings interstitial or originating only a little before the transverse median nervure 2
2. Cubitus in the hind wings interstitial; triangular area of propodeum not sharply defined, but striate or coarsely rugose ..... *Hoplisoides*
   Cubitus in hind wings most frequently originating a little before the transverse median nervure; triangular area of propodeum always well defined, the enclosure always longitudinally striate ... *Hoplisus*

Hoplisoides Gribodo

KEY TO THE SPECIES

1. Females 2
   Males 6
2. Propodeum and first abdominal segments more or less reddish 3
   Propodeum and first abdominal segment not reddish 4
3. Last abdominal tergite with a well developed pygidial area which is subtriangular and rugose; second discoidal cell with apical portion dark fuscous ..... *spilopterus*
   Last abdominal tergite with the pygidial area poorly developed, short and broad, strongly punctured; second discoidal cell pale fuscous except in its lower portion ..... *tricolor*
4. Last abdominal tergite yellow; legs reddish ..... *pygidialis*
   Last abdominal tergite black 5
5. Wings hyaline, excepting the usual fuscous cloud in the vicinity of the radial cell; enclosure of propodeum with 14–16 close-set ridges, *confertus*

Wings fuscous, the cloud in the vicinity of radial cell darker; enclosure of propodeum with 10–12 well-separated ridges, *denticulatus*

6. Last abdominal sternite bifid; first abdominal segments subpetiolate; wings entirely fuliginous; antennae rufous ..... *lamniferus*

Last abdominal sternite not bifid; first abdominal segment sessile; wings hyaline with a dark spot 7

7. Fifth abdominal sternite armed on each side with a strong projection, *confertus*

Fifth abdominal sternite not armed with a projection 8

8. Eighth and ninth joints simple beneath 9

Eighth and ninth joints of the flagellum with a prominence beneath 10

9. Triangular area of propodeum distinctly striated; propodeum and first abdominal segment not red, last dorsal segment yellow... *pygidialis*

Triangular area of propodeum smooth; propodeum and first abdominal segment more or less red ..... *tricolor*

10. Clypeus with a bunch of long hairs in each lateral angle; yellow abdominal bands 2 and 3 suddenly broadened laterally.. *microcephalus*

Clypeus with hairs in lateral angle not long nor in a bunch 11

11. Wings fuscous, the cloud in the vicinity of the radial cell dark; propodeum with two yellow spots ..... *denticulatus*

Wings subhyaline, except the usual cloud in the vicinity of the radial cell; propodeum not marked with yellow ..... *barbatulus*

Hoplisoides confertus (Fox).

1895. *Gorytes confertus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 525.
1908. *Hoplisoides barbatulus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 344, ♀.

Males 6, females 3: Glen (7), Pine Ridge (1) and Sowbelly Canyon (1); June 23 to August 20.

The three female specimens have a median transverse row of dark, stiff hairs on the clypeus. Fox does not mention this character in his description. Smith described these as the unknown female of *barbatulus* but this does not seem to be justified, and as they run in Fox's table to *confertus* and agree with his description of *confertus* except in the above character, they are placed here.

Hoplisoides tricolor (Cresson).

1868. *Gorytes tricolor* Cresson, *Trans. Amer. Ent. Soc.*, I, p. 380.
1895. *Gorytes tricolor* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 526.

Males 3, females 12: Mitchell (1), McCook (1), Glen (12)

and Monroe Canyon (1); July 28 to August 20; visits flowers of *Gutierrezia sarothrae* and *Helianthus* sp.

Hoplisoides pygidialis (Fox).

1895. *Gorytes pygidialis* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 528.

Females 2: Glen, August 14, 1905, and Monroe Canyon, August 20, 1908 (R. W. Dawson).

The specimen taken at Monroe Canyon was caught while supplying its nest with a leafhopper, *Ceresa* sp.

Hoplisoides microcephalus (Handlirsch).

1888. *Gorytes microcephalus* Handlirsch, *Sitzungsberichte der Akademie der Wissenschaften*, Wien, XCVIII, p. 405.

1895. *Gorytes microcephalus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 529.

Males 3: Meadow, July 3, 1915 (E. G. Anderson); Glen, August 20, 1906 (H. S. Smith), and Glen, August 21, 1906 (P. R. Jones).

Hoplisoides barbatulus (Handlirsch).

1888. *Gorytes barbatulus* Handlirsch, *Sitzungsberichte der Akademie der Wissenschaften*, Wien, XCVIII, p. 408.

1895. *Gorytes barbatulus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 530.

Males 1: Pine Ridge (1); July. Female unknown.

Hoplisoides denticulatus (Packard).

1865. *Gorytes denticulatus* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 430, ♂.

1888. *Gorytes barbatulus* Handlirsch, *Sitzungsberichte der Akademie der Wissenschaften*, Wien, XCVIII, p. 410.

1895. *Gorytes denticulatus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 530.

Males 1, females 1: Omaha, August 3, 1914 (L. T. Williams), on *Chamaecrista fasciculata*, and Haigler, July 11, 1911 (J. T. Zimmer), on *Helianthus petiolaris*.

Hoplisoides spilopterus (Handlirsch).

1888. *Gorytes spilopterus* Handlirsch, *Sitzungsberichte der Akademie der Wissenschaften*, Wien, XCVIII, p. 414.

1895. *Gorytes spilopterus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 530.

Females 1: Omaha, July 14, 1914 (L. T. Williams), on *Chamaecrista fasciculata*.

This specimen has the clypeus entirely yellow and the fifth

dorsal abdominal segment entirely black; otherwise it agrees with the description of *spilopterus.*

Hoplisoides lamniferus (Fox).

1895. *Gorytes lamniferus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 532.

Males 8: Rulo (3), South Bend (1), Louisville (1), West Point (2) and Halsey (1); June 25 to August 9; visits flowers of *Melilotus alba.*

Hoplisus LePeletier

KEY TO THE SPECIES

1. Posterior face of propodeum coarsely reticulate 2
   Posterior face of propodeum almost smooth 5
2. Flagellum yellow beneath, black above; sculpture of enclosure of propodeum coarsely and irregularly rugose .....*asperatus*
   Flagellum entirely black, or with the basal joints reddish 3
3. Supraclypeal area black; propodeum with two yellow spots; yellow of inner eye margins narrow; apical abdominal segments yellow, *elegantulus*
   Supraclypeal area yellow; propodeum without yellow spots 4
4. Tubercles yellow; wings decidedly yellowish basally .....*albosignatus*
   Tubercles black; wings not, or but slightly, yellowish basally..*corrugis*
5. Posterior face of propodeum very slightly rugose; propodeum with two yellow spots .....*simillimus*
   Posterior face of propodeum with large, sparse, shallow punctures; propodeum with two large rufous spots; sixth and seventh abdominal segments rufous .....*rufocaudatus*

Hoplisus asperatus (Fox).

1895. *Gorytes asperatus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 534.

Females 2: Rulo, July 1, 1915 (L. Bruner), and Lincoln, June 21, 1912 (R. W. Dawson).

Hoplisus elegantulus H. S. Smith.

1908. *Hoplisus elegantulus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 346.

Males 4: Glen (1) and Monroe Canyon (3); August 6 to 19.

Hoplisus albosignatus (Fox).

1892. *Gorytes albosignatus* Fox, *Can. Ent.*, XXIV, p. 152.
1895. *Gorytes albosignatus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 533.

Males 2, females 1: Warbonnet Canyon (2) and Sioux county (1); May and June.

Hoplisus corrugis Mickel.

1918. *Hoplisus corrugis* Mickel, *Univ. Nebr. Studies,* XVII, p. 319.

Males 1: Mitchell, June 16, 1916 (C. E. Mickel).

Hoplisus simillimus (F. Smith).

1856. *Gorytes simillimus* F. Smith, *Cat. Hym. Brit. Mus.,* IV, p. 367.
1867. *Gorytes ephippiatus* Packard, *Proc. Ent. Soc. Phil.,* VI, p. 426.
1895. *Gorytes simillimus* Fox, *Proc. Acad. Nat. Sc. Phil.,* p. 536.

Males 3, females 4: Rulo (1), Omaha (1), Carns (1), Glen (1), Monroe Canyon (2) and Warbonnet Canyon (1); June 23 to August 29; visits flowers of *Solidago canadensis.*

Hoplisus rufocaudatus Mickel.

1916. *Hoplisus rufocaudatus* Mickel, *Trans. Amer. Ent. Soc.,* XLII, p. 401.

Males 1: Mitchell, August 12, 1915 (E. M. Partridge).

Pseudoplisus Ashmead

KEY TO THE SPECIES

1. Females 2
   Males 5
2. Suture between mesonotum and scutellum not foveolate; wings yellowish ferruginous; abdomen with short, silky, golden pubescence, *phaleratus*
   Suture between mesonotum and scutellum foveolate 3
3. Suture between mesepimeron and metapleurae foveolate for the entire length; clypeus entirely black; front, venter, and last three abdominal tergites with large punctures; suture between triangular enclosure and sides of propodeum foveolate .....*varipunctus*
   Suture between mesepimeron and metapleurae not foveolate 4
4. Wings subfuscous; clypeus entirely yellow; propodeum entirely black; pygidial area with sparse, shallow punctures .....*bipartitus*
   Wings hyaline, the marginal cell excepted; clypeus with base only yellow; propodeum with two rufous spots; pygidial area with deep closer punctures .....*rufomaculatus*
5. Suture between mesonotum and scutellum not foveolate 6
   Suture between mesonotum and scutellum foveolate 7
6. Wings with a light yellowish cast; flagellum rather long, the joints rounded out beneath .....*phaleratus*
   Wings dark fuliginous, the apex hyaline; flagellum shorter and somewhat clavate, the joints not rounded out beneath .....*propinquus*
7. Wings entirely fuliginous; first abdominal tergite entirely yellow;

clypeus black ..... *infumatus*
Wings hyaline, except the usual fuscous cloud 8
8. Antennae long, reaching at least to apex of scutellum; propodeum not spotted with rufous ..... *bipartitus*
Antennae short, not reaching to apex of scutellum; propodeum spotted with rufous ..... *rufomaculatus*

Pseudoplisus phaleratus (Say).

1836. *Gorytes phaleratus* Say, *Bost. Journ. Nat. Hist.*, I, p. 368.
1859. *Gorytes phaleratus* Say, *Leconte edition*, II, p. 752.
1895. *Gorytes phaleratus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 537.

Males 30, females 24: Omaha (34), South Sioux City (1), Weeping Water (2), Lincoln (1), West Point (7), Carns (1), Haigler (1), Mitchell (1), Pine Ridge (1), Glen (1) and Monroe Canyon (3); July 4 and August 17; visits flowers of *Chamaecrista fasciculata* and *Monarda* sp.

Pseudoplisus varipunctus H. S. Smith.

1908. *Pseudoplisus varipunctus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 348.

Females 5: Omaha (1), West Point (3) and Maskell (1); June 25 to July 25; visits flowers of *Chamaecrista fasciculata*.

The specimens from Omaha and Maskell have been taken since Smith described this species.

Pseudoplisus propinquus (Cresson).

1868. *Gorytes propinquus* Cresson, *Trans. Amer. Ent. Soc.*, I, p. 379.
1895. *Gorytes propinquus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 537.

Males 1: Glen, August 14, 1906 (L. Bruner).

Pseudoplisus infumatus Mickel.

1916. *Pseudoplisus infumatus* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 402.

Males 3: West Point (2) and Haigler (1); June and August.

Pseudoplisus bipartitus (Handlirsch).

1888. *Gorytes bipartitus* Handlirsch, *Sitzungsberichte der Akademie der Wissenschaften*, Wien, XCVII, p. 521.
1895. *Gorytes bipartitus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 538.

Females 1: Sowbelly Canyon, June 23, 1911 (R. W. Dawson).

Pseudoplisus rufomaculatus (Fox).

1895. *Gorytes rufomaculatus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 538.

Females 1: Bad lands at the mouth of Monroe Canyon, July 22, 1901 (M. A. Carriker, Jr.), on *Helianthus* sp.

PSENINAE

KEY TO THE GENERA

1. Cubital vein in hind wings originating beyond the transverse median nervure, the latter short and straight, perpendicular; submedian cell in front wings a little shorter than the median, the transverse median vein not interstitial with the basal vein; second cubital cell usually much narrower above ..... *Diodontus*

   Cubital vein in hind wings originating before the transverse median vein, the latter long and oblique or slightly bent, but not perpendicular 2

2. Second and third cubital cells each receiving a recurrent nervure, or the first recurrent nervure is interstitial with the first transverse cubital vein; head with a spine between the antennae; clypeus anteriorly rimmed, and with a median sinus ..... *Psen*

   Second cubital cell receiving both recurrent nervures, rarely with the first recurrent nervure interstitial with the first transverse cubital vein; inner spur of hind tibiae dilated; propodeum with a median sulcus, the area at the base striate or alveolate; petiole of abdomen long, usually furrowed laterally; clypeus convex or subconvex, separated, anteriorly more or less rounded and with a slight vein, but without a median sinus; labrum hidden ..... *Mimesa*

Diodontus Curtis

KEY TO THE SPECIES

Abdomen black, with bluish reflection, apical margin of segments testaceous ..... *tibialis*

Abdomen more or less red ..... *suffusa*

Diodontus tibialis (Cresson).

1872. *Mimesa tibialis* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 488.
1898. *Psen tibialis* Fox, *Trans. Amer. Ent. Soc.*, XXV, p. 18.

Males 22, female 4: Rulo (1), Omaha (20), Louisville (1), Red Cloud (3) and McCook (1); June 20 to August 20; visits flowers of *Chamaecrista fasciculata*.

Diodontus suffusa (Fox).

1898. *Psen suffusa* Fox, *Trans. Amer. Ent. Soc.*, XXV, p. 18.

Females 7: Omaha (4) and Lincoln (3); June 28 to August 19; visits flowers of *Chamaecrista fasciculata* and *Physalis* sp.

Psen Latreille

Psen monticola (Packard).

1867. *Mimesa monticola* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 407.
1898. *Psen monticola* Fox, *Trans. Amer. Ent. Soc.*, XXV, p. 11.

Females 4: Glen (1) and Monroe Canyon (3); August.

Mimesa Shuckard

KEY TO THE SPECIES

Females

1. Abdomen more or less reddish 2
   Abdomen entirely black 6
2. Petiole of abdomen as long or longer than the hind femur; posterior face of propodeum finely sculptured .....*cressoni*
   Petiole shorter than the hind femur 3
3. Posterior face of propodeum finely rugose, not reticulate .....*proxima*
   Posterior face of propodeum coarsely sculptured, rugoso-reticulate 4
4. Mandibles with a strong tooth within near the apex; second segment and sometimes base of the third reddish .....*unicincta*
   Mandibles not toothed within 5
5. Size small, 7 mm.; apex of first segment and second segment reddish, *pauper*
   Size larger, 10 mm.; first, second and third segments reddish, *nebrascensis*
6. Petiole longer than hind trochanter and femur combined; mesonotum with longitudinal folds .....*punctata*
   Petiole not as long as the hind femur 7
7. All the tarsi light yellowish .....*chalcifrons*
   All the tarsi dark, nearly black .....*mandibularis*

Males

1. Abdomen more or less reddish 2
   Abdomen entirely black 4
2. Petiole distinctly longer than the hind femur; flagellar joints 2–5 dentate beneath .....*cressoni*
   Petiole shorter than the hind femur 3

3. Posterior face of propodeum sculptured; reticulate; stigma entirely dark, without a proximal whitish spot .....*unicincta*
   Posterior face of propodeum smooth; stigma with a proximal whitish spot .....*dawsoni*
4. All the tarsi yellowish; last joint of flagellum entirely black; flagellar joints 4–6 prominent beneath .....*mellipes*
   All the tarsi dark, blackish; last joint of flagellum reddish; none of the flagellar joints prominent beneath .....*granulosus*

Mimesa granulosa (Fox).

1898. *Psen granulosus* Fox, *Trans. Amer. Ent. Soc.*, XXV, p. 15.
1908. *Mimesa granulosa* H. S. Smith, Univ. Nebr. Studies, VIII, p. 389.

Males 13: Glen (11) and Harrison (2); August 9 to 21; visits flowers of *Helianthus* sp.

The eleven specimens taken at Glen were described by H. S. Smith as the female of this species. The specimens are all males, however, and the female is therefore still undescribed.

Mimesa proxima Cresson.

1865. *Mimesa proxima* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 488.
1898. *Psen proximus* Fox, *Trans. Amer. Ent. Soc.*, XXV, p. 16.

Females 12: Glen (8), Harrison (3) and Monroe Canyon (1); August 4 to 21.

Mimesa unicincta Cresson.

1865. *Mimesa unicincta* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 488.
1898. *Psen unicincta* Fox, *Trans. Amer. Ent. Soc.*, XXV, p. 15.

Males 2, females 3: Glen (4) and Sioux county (1); August 14 and 17.

Mimesa dawsoni Mickel.

1916. *Mimesa dawsoni* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 420.

Males 1: Harrison, August 12, 1912 (R. W. Dawson).

Mimesa nebrascensis H. S. Smith.

1908. *Mimesa nebrascensis* H. S. Smith, Univ. Nebr. Studies, VIII, p. 390.

Females 1: Lincoln.

Mimesa pauper Packard.

1867. *Mimesa pauper* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 409.
1898. *Psen pauper* Fox, *Trans. Amer. Ent. Soc.*, XXV, p. 14.

Females 3: Omaha, August 20, August 30 and September 5, 1913 (L. T. Williams).

Mimesa chalcifrons (Packard).

1867. *Psen chalcifrons* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 401.
1898. *Psen chalcifrons* Fox, *Trans. Amer. Ent. Soc.*, XXV, p. 13.

Females 1: Butte, July 2, 1914 (R. W. Dawson).

Mimesa cressoni Packard.

1867. *Mimesa cressonii* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 405.
1898. *Psen cressonii* Fox, *Trans. Amer. Ent. Soc.*, XXV, p. 12.
1916. *Mimesa cressoni* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 421.

Males 59, females 27: Lincoln (5), Fairmont (2), West Point (1), Broken Bow (2), Oxford (2), Haigler (1), Imperial (1), Ogallala (3), Brown county (1), Mitchell (4), Glen (40), Harrison (19), Monroe Canyon (1) and Warbonnet Canyon (1); June 10 to October; visits flowers of *Helianthus* sp. and *Gutierrezia sarothrae*.

Mimesa punctata (Fox).

1898. *Psen punctatus* Fox, *Trans. Amer. Ent. Soc.*, XXV, p. 9.

Females 2: Monroe Canyon (2); August 19, 1912, and August 20, 1908 (R. W. Dawson).

Mimesa mellipes (Say).

1837. *Psen mellipes* Say, *Bost. Journ. Nat. Hist.*, I, p. 369.
1898. *Psen mellipes* Fox, *Trans. Amer. Ent. Soc.*, XXV, p. 8.

Males 1: Lincoln, May 16, 1908.

Mimesa mandibularis H. S. Smith.

1908. *Mimesa mandibularis* H. S. Smith, Univ. Nebr. Studies, VIII, p. 392.

Females 3: Glen (1) and Monroe Canyon (2); August 17 to 21.

The two specimens from Monroe Canyon have been collected since Smith described the species in 1908.

OXYBELINAE

KEY TO THE GENERA

Metanotal spine long, broad, and emarginate at apex; mandibles without a median tooth within; clypeus in female truncate, in male four- or five-dentate ..... *Notoglossa*

Metanotal spine acute or bluntly rounded at apex, never emarginate; mandibles with a median tooth within; clypeus in female truncate, in male three-dentate ..... *Oxybelus*

Notoglossa Dahlbom

KEY TO THE SPECIES

Females

1. Lateral points of squamae short, not exceeding the tips 2
   Lateral points of squamae long, much exceeding the tips 4
2. First two abdominal segments largely ferruginous; metanotal spine whitish ..... *abdominalis*
   Abdomen largely black (except the two apical segments); metanotal spine black 3
3. Front convex in profile; all the tibiae more or less yellowish.. *emarginata*
   Front protuberant above; intermediate and posterior tibiae black, *frontalis*
4. Abdomen shining, sparsely punctured; antennae entirely yellow; pubescence of front golden ..... *cressoni*
   Abdomen closely and strongly punctured; antennae dark, not yellow; pubescence of front silvery 5
5. Pronotum entirely black above; scutellum not spotted with yellow; markings whitish ..... *intermedia*
   Pronotum entirely yellow above; scutellum with two yellow spots; markings lemon-yellow ..... *decorosa*

Males

1. Lateral points of squamae short, not exceeding the tips 2
   Lateral points of squamae long, much exceeding the tips 5
2. First two segments of abdomen largely ferruginous ..... *abdominalis*
   All of the abdomen largely black 3
3. Sides of propodeum not striate; finely, shallowly, closely punctate, *minor*
   Sides of propodeum distinctly, transversely striate 4
4. Front protuberant above; abdomen with four or five strong spines on each side, ten-spotted ..... *frontalis*
   Front convex in profile, abdomen with two or three weak spines, four- to eight-spotted ..... *emarginata*

5. Abdomen entirely black, shining, rather sparsely punctured, with two rather weak spines on each side .....*cressoni*
   Abdomen more or less marked with yellowish or whitish, quite strongly punctured, with two to four strong spines on each side 6
6. Vertex with a median tubercle; occiput strongly striato-punctate, *cockerelli*
   Vertex without a median tubercle; occiput strongly punctured but not striato-punctate 7
7. Apical abdominal segments black; markings yellowish .....*incisura*
   Three apical abdominal segments ferruginous; markings white, *albomaculata*

Notoglossa frontalis (Robertson).

1889. *Oxybelus frontalis* Robertson, *Trans. Amer. Ent. Soc.*, XVI, p. 83.

Males 15, females 4: Omaha (10), Lincoln (2), Fairmont (1), Broken Bow (5) and Glen (1); June 17 to October; visits flowers of *Solidago* sp., *Aster multiflorus* and *Dicrophyllum marginatum*.

Notoglossa abdominalis (Baker).

1896. *Oxybelus abdominalis* Baker, *Ent. News*, VII, p. 158.

Males 14, females 14; Omaha (2), West Point (1), Bridgeport (1), Glen (3) and Harrison (21); June 22 to August 21; visits flowers of *Chamaecrista fasciculata, Gutierrezia sarothrae* and *Helianthus* sp.

Notoglossa emarginata (Say).

1837. *Oxybelus emarginatus* Say, *Bost. Journ. Nat. Hist.*, I, p. 375.
1889. *Oxybelus emarginatus* Robertson, *Trans. Amer. Ent. Soc.*, XVI, p. 84.
1901. *Notoglossa emarginata* Robertson, *Trans. Amer. Ent. Soc.*, XXVII, p. 204.

Males 151, females 71: Rulo (1), Omaha (55), South Bend (1), Lincoln (4), Fairmont (2), West Point (7), Broken Bow (12), McCook (1), Imperial (2), Halsey (1), Bridgeport (5), Mitchell (29), Glen (86), Harrison (9), Monroe Canyon (4) and Sowbelly Canyon (1); June 20 to September 7; visits flowers of *Chamaecrista fasciculata, Melilotus alba, Asclepias* sp., *Vernonia* sp., *Solidago serotina, Helianthus petiolaris, Cleome serrulata* and *Gutierrezia sarothrae*.

Notoglossa minor Mickel.

1916. *Notoglossa minor* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 428.

Males 1: Omaha, July 16, 1914 (L. T. Williams); visits flowers of *Chamaecrista fasciculata.*

Notoglossa intermedia (Baker).

1896. *Oxybelus intermedius* Baker, *Ent. News,* VII, p. 160.

Females 1: Glen, August 20, 1906 (H. S. Smith).

Notoglossa cockerelli (Baker).

1896. *Oxybelus cockerelli* Baker, *Ent. News,* VII, p. 61.

Males 2: Glen (2); August 17, 1906 (H. S. Smith), and August 17, 1906 (P. R. Jones); visits flowers of *Solidago* sp.

Notoglossa incisura Mickel.

1916. *Notoglossa incisura* Mickel, *Trans. Amer. Ent. Soc.,* XLII, p. 430.

Males 9: Harrison (9); August 9, 1908 (R. W. Dawson); visits flowers of *Helianthus* sp.

Notoglossa albomaculata Mickel.

1918. *Notoglossa albomaculata* Mickel, *Univ. Nebr. Studies,* XVII, p. 320.

Males 2: Mitchell (2); July 21, 1916 (C. E. Mickel).

Notoglossa decorosa Mickel.

1916. *Notoglossa decorosa* Mickel, *Trans. Amer. Ent. Soc.,* XLII, p. 430.

Females 1: Omaha, July 9, 1914 (L. T. Williams); visits flowers of *Chamaecrista fasciculata.*

Notoglossa cressoni (Robertson).

1889. *Oxybelus cressonii* Robertson, *Trans. Amer. Ent. Soc.,* XVI, p. 83.

Males 2, females 9: Omaha (9); June 26 to July 23; visits flowers of *Chamaecrista fasciculata.*

Oxybelus Latreille

KEY TO THE SPECIES

1. Vertex with a distinct median tubercle; posterior ocelli each placed on the upper and outer side of a tubercle, causing these ocelli to look outwards and upwards instead of in the normal direction 2

Vertex without a distinct median tubercle; posterior ocelli normally placed 3

2. Occiput distinctly striato-punctate; punctures of abdomen of medium size; ornaments whitish ..... *striatus*

Occiput strongly punctured; punctures of abdomen coarse; ornaments yellowish ..... *cornutus*

3. Squamae apparently joined at the base (this appearance is caused by the metanotum being yellow) 4

Squamae not apparently joined at the base 7

4. Body covered with an unusually dense growth of short pubescence; abdomen more or less ferruginous 5

Body not unusually pubescent; apical segment of abdomen sometimes ferruginous 6

5. Abdomen entirely ferruginous except first tergite; two apical segments with conspicuous blackish pubescence ..... *argentarius*

Two apical, abdominal segments only, ferruginous; apical segments with thin golden pubescence ..... *glenensis*

6. Mandibles black; continuous fasciae on all the abdominal tergites; apical segment black ..... *albosignatus*

Mandibles yellow; abdominal tergites with lateral spots; apical segment ferruginous ..... *unicus*

7. Mandibles distinctly yellow 8

Mandibles black or piceous, not yellow 10

8. Lateral portions of abdominal segments ferruginous; abdomen not marked with yellowish spots ..... *umbrosus*

Abdomen not at all ferruginous (except the apical segment); abdomen marked with yellowish spots 9

9. Abdomen strongly punctured; scutellum not marked with yellow, *packardi*

Abdomen finely and sparsely punctured; scutellum marked with yellow, *laetus*

10. Apical abdominal segments ferruginous 11

Apical abdominal segments dark 14

11. Abdominal segments without lateral spines 12

Abdominal segments with lateral spines 13

12. Mesepisterna produced anteriorly so as to form a prominent projection; markings whitish ..... *pectorosus*

Mesepisterna not produced anteriorly; markings lemon-yellow, *delicatus*

13. Abdomen rather finely and closely punctured; two apical abdominal segments ferruginous; squamae approximate at the base, almost touching ..... *apicatus*

Abdomen rather coarsely punctured; three apical abdominal segments

of male, two of female, ferruginous; squamae widely separated at the base ..... *fastigatus*

14. Abdomen finely punctured 15
Abdomen quite coarsely punctured 16

15. Abdominal tergites silvery fasciate apically, narrowly margined inwardly with bright fulvous ..... *robertsoni*
Abdominal tergites not silvery fasciate; with pale yellowish lateral spots rather widely separated ..... *quadrinotatus*

16. Size large, 13 mm.; abdomen of male without lateral spines; episterna coarsely, longitudinally striato-punctate below ..... *major*
Size smaller, 6–9 mm.; abdomen of male with strongly developed lateral spines; episterna coarsely punctate throughout ..... *subulatus*

Oxybelus robertsoni Baker.

1896. *Oxybelus robertsoni* Baker, *Ent. News*, VII, p. 156.
1908. *Oxybelus robertsoni* H. S. Smith, Univ. Nebr. Studies, VIII, p. 409.

Males 1: Warbonnet Canyon, July 20, 1901; visits flowers of *Eriogonum* sp.

Oxybelus apicatus H. S. Smith.

1908. *Oxybelus apicatus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 409.

Males 1: Warbonnet Canyon, July 20, 1901 (M. Cary); visits flowers of *Eriogonum* sp.

Oxybelus glenensis H. S. Smith.

1908. *Oxybelus glenensis* H. S. Smith, Univ. Nebr. Studies, VIII, p. 410.

Females 1: Glen, August 18, 1906 (P. R. Jones).

Oxybelus argentarius Mickel.

1916. *Oxybelus argentarius* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 431.

Females 2: Harrison, August 9, 1908 (C. H. Gable), and Glen, August 13, 1906 (M. H. Swenk); visits flowers of *Cleome serrulata*.

Oxybelus umbrosus Mickel.

1916. *Oxybelus umbrosus* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 432.

Males 2: Harrison, August 4, 1908 (C. H. Gable), and August 9, 1908 (R. W. Dawson); visits flowers of *Helianthus* sp.

Oxybelus fastigatus Mickel.

1916. *Oxybelus fastigatus* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 433.

Males 5, females 1: Ogallala (1) and Harrison (5); June 24 to August 9; visits flowers of *Helianthus* sp.

Oxybelus delicatus Mickel.

1918. *Oxybelus delicatus* Mickel, *Univ. Nebr. Studies*, XVII, p. 322.

Males 1: Mitchell, July 17, 1916 (C. E. Mickel); visits flowers of *Melilotus alba*.

Oxybelus laetus Say.

1837. *Oxybelus laetus* Say, *Bost. Journ. Nat. Hist.*, I, p. 375.
1889. *Oxybelus laetus* Robertson, *Trans. Amer. Ent. Soc.*, XVI, p. 82.

Females 4: Rulo (1) and Omaha (3); June 29 to August 17; visits flowers of *Trifolium pratense*.

Oxybelus packardi Robertson.

1889. *Oxybelus packardi* Robertson, *Trans. Amer. Ent. Soc.*, XVI, p. 80.

Males 16: Rulo (2), Omaha (1), Bridgeport (3), Mitchell (6), Glen (1) and Harrison (3); June 30 to August 20; visits flowers of *Solidago canadensis*, *Melilotus alba* and *Helianthus* sp.

Oxybelus striatus Baker.

1896. *Oxybelus striatus* Baker, *Ent. News*, VII, p. 60.

Males 10: Omaha (5), Glen (4) and Monroe Canyon (1); July 30 to August 24; visits flowers of *Aster multiflorus* and *Solidago canadensis*.

Oxybelus cornutus Robertson.

1889. *Oxybelus cornutus* Robertson, *Trans. Amer. Ent. Soc.*, XVI, p. 80.
1908. *Oxybelus cornutus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 407.

Males 36, females 24: Omaha (1), Broken Bow (1), Bridgeport (2), Mitchell (32), Glen (15), Harrison (7) and Monroe Canyon (1); July 11 to August 28; visits flowers of *Chamae-*

crista fasciculata, Solidago sp., *Melilotus alba, Cleome serrulata* and *Helianthus* sp.

These specimens show all the intergradations between the variety *quadricolor,* having the anterior two thirds of the mesonotum ferruginous, and *cornutus,* having the mesonotum entirely black.

Oxybelus major Mickel.

1916. *Oxybelus major* Mickel, *Trans. Amer. Ent. Soc.,* XLII, p. 434.

Males 1: South Bend, July 14, 1915 (E. M. Partridge); visits flowers of *Melilotus alba.*

Oxybelus pectorosus Mickel.

1918. *Oxybelus pectorosus* Mickel, *Univ. Nebr. Studies,* XVII, p. 321.

Males 1: Mitchell, July 17, 1916 (C. E. Mickel); visits flowers of *Melilotus alba.*

Oxybelus subulatus Robertson.

1889. *Oxybelus subulatus* Robertson, *Trans. Amer. Ent. Soc.,* XVI, p. 79.

Males 16; Omaha (1), South Bend (1), West Point (1), South Sioux City (1), Concord (1), Mitchell (9), Glen (1) and Jim Creek (1); June 20 to August 17; visits flowers of *Melilotus alba.*

Oxybelus albosignatus H. S. Smith.

1908. *Oxybelus albosignatus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 407.

Females 5: West Point (1), Holt county (1), Curtis (1), Bridgeport (1) and Monroe Canyon (1); June 28 to August 20.

The specimens from Curtis, Bridgeport and Monroe Canyon have been taken since the species was described.

Oxybelus unicus Mickel.

1918. *Oxybelus unicus* Mickel, *Univ. Nebr. Studies,* XVII, p. 323.

Females 5: Mitchell (5); July 20 to 22.

Oxybelus quadrinotatus Say.

1824. *Oxybelus quadrinotatus* Say, *Keating's Narrat. Exped.,* II, App., p. 338.

1889. *Oxybelus quadrinotatus* Robertson, *Trans. Amer. Ent. Soc.,* XVI, p. 78.

Males 19, females 4: Omaha (8), Lincoln (3), West Point (3), Mitchell (1), Crawford (1), Glen (3) and Harrison (2); May 16 to August 25; visits flowers of *Chamaecrista fasciculata, Solidago rigida, Solidago canadensis, Spiraea* sp. and *Ceanothus* sp.

There is also one specimen of the variety *montanus* in the collection; Warbonnet Canyon, July 21, 1901 (M. Cary); visits flowers of *Borage* sp.

CRABRONINAE

KEY TO THE TRIBES

Abdomen depressed, flat beneath; second discoidal cell much longer than the first, acuminate at the tip ..... *Anacrabronini*

Abdomen seldom subdepressed, convex dorsally and ventrally; second discoidal cell shorter than the first, usually very much so, broadened and subtruncate at the tip ..... *Crabronini*

ANACRABRONINI

Anacrabro Packard

Anacrabro ocellatus Packard.

1866. *Anacrabro ocellatus* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 68.
1895. *Anacrabro ocellatus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 133.

Males 41, females 20: Omaha (40), South Bend (8), Lincoln (1), West Point (3), South Sioux City (3), Neligh (2) and Carns (4); June 23 to August 19; visits flowers of *Chamaecrista fasciculata, Asclepias tuberosa, Euphorbia* sp. and *Ceanothus americanus.*

CRABRONINI

KEY TO THE GENERA

1. Mandibles simple, acute at apex ..... *Lindenius*
   Mandibles truncate, bidentate or tridentate at apex 2
2. First abdominal segment petioliform or abdomen distinctly petiolate, *Rhopalum*
   Abdomen sessile or subsessile 3
3. Mesepimeron with a strong carina following the second pleural suture; mesepisternum strongly sculptured with some form of striation, *Solenius*
   Mesepimeron without a strong carina; mespisternum not strongly sculptured, usually only punctate ..... *Crabro*

Lindenius LePeletier

KEY TO THE SPECIES

Females

1. The two convexities of the enclosure of the propodeum smooth, polished; posterior tibiae yellow at base only; clypeus black 2
   The two convexities of the enclosure of the propodeum distinctly and obliquely striated, subopaque; posterior tibiae yellow except spot within; clypeus yellow ..... *flaviclypeus*
2. Cheeks with a blunt spine beneath; scutellum black ..... *buccadentis*
   Cheeks not spined beneath; scutellum marked with yellow ..... *errans*

Males

1. Cheeks not spinose beneath, unarmed; hind tibiae yellow at the base only ..... *errans*
   Cheeks with a strong spine beneath 2
2. Convexities of enclosure of propodeum distinctly striated; hind tibiae except a blotch within, clypeus and scape entirely yellow. *armaticeps*
   Convexities of enclosure of propodeum smooth, polished; hind tibiae yellow at base only; clypeus and scape posteriorly black. *buccadentis*

Lindenius flaviclypeus (Fox).

1895. *Crabro flaviclypeus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 186.

Females 4: Mitchell (1), Glen (2) and Harrison (1); June 17 to August 20; visits flowers of *Helianthus* sp.

Lindenius armaticeps (Fox).

1895. *Crabro armaticeps* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 185.

Males 1: Harrison, August 4, 1908 (C. H. Gable); visits flowers of *Helianthus* sp.

Lindenius buccadentis Mickel.

1916. *Lindenius buccadentis* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 427.

Males 2, females 6: Omaha (5), West Point (1) and Glen (2); June 20 to August 18; visits flowers of *Chamaecrista fasciculata, Solidago* sp. and *Gutierrezia sarothrae.*

Lindenius errans (Fox).

1895. *Crabro errans* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 184.
1908. *Lindenius errans* H. S. Smith, Univ. Nebr. Studies, VIII, p. 404.

Males 4, females 46: Omaha (22), Lincoln (4), West Point (1), Mitchell (4), Crawford (1), Glen (10) and Harrison (12); May to August 22; visits flowers of *Chamaecrista fasciculata, Mentzelia* sp., *Solidago* sp., *Cirsium* sp., *Medicago sativa* and *Helianthus* sp.

The specimens with the black scutellum, mentioned by H. S. Smith, are *buccadentis*.

Rhopalum Kirby

Rhopalum decorum (Fox).

1895. *Crabro decorus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 200.
1908. *Rhopalum decorum* H. S. Smith, Univ. Nebr. Studies, VIII, p. 395.

Females 5: Glen (5); August 13, 1906 (H. S. Smith).

Solenius LePeletier

KEY TO THE SPECIES

Females

1. Anterior margin of clypeus produced into a strong, truncated process in the middle 2
   Anterior margin of the clypeus not strongly produced in the middle, usually rounded 5
2. Head and thorax very coarsely sculptured, being covered with large punctures, the mesonotum, scutellum and mesepisterna frequently with strong striations interspersed with punctures; abdomen with strong, distinctly separated punctures 3
   Head and thorax not very coarsely sculptured, the head rather finely and closely punctured; mesepisterna striated; ocelli forming an equilateral triangle; pronotum rounded at the sides, not dentate 4
3. Punctures of the head extremely large, deep and well separated, those on the abdomen also coarse but less so than on the head; spots on tergites four and five always separated .....*interruptus*
   Punctures of the head strong, but much less than in *interruptus*, and closer, especially between the ocelli and occiput; punctures of the abdomen somewhat finer than those of the head; tergites four and five with the spots united into bands .....*bellus*
4. First joint of flagellum fully as long as the three following united; posterior face of propodeum with feebly developed lateral ridges; pedicel more or less yellow .....*obscurus*
   First joint of flagellum scarcely as long as the three following united;

posterior face of propodeum with scarcely a trace of lateral ridges (no distinct transverse series of foveae on propodeum) . . *nigrifrons*

5. Mesonotum finely striated, transversely so on anterior portion, longitudinally on remainder; first joint of the flagellum longer than the two following united . . . . . *singularis*

Mesonotum not striated, either finely or rugosely punctured 6

6. Pygidium much narrowed apically, depressed or excavated 7

Pygidium broad, triangular, flat, not depressed or excavated 13

7. Abdomen dorsally indistinctly punctured, or impunctate; pygidium always with a lateral fringe of long, thick hairs; head always finely and closely punctured; second sternite with large, much scattered punctures; propodeum not marked by foveae between the upper surface and the posterior face . . . . . *sayi*

Abdomen dorsally distinctly punctured, usually strongly so, particularly the first tergite 8

8. Space between the eyes at the base of the clypeus much less than half the length of the scape, slightly more than one fourth the length of the scape; pygidium with a lateral fringe of stiff hairs; vertex with large separated punctures . . . . . *banksi*

Space between the eyes at the base of the clypeus equal to about half the length of the scape 9

9. Pygidium without the lateral fringe of stiff hairs, or it is but feebly represented; head with strong, sometimes large, separated punctures 10

Pygidium with lateral fringe always present and distinct; head with close, rather fine punctures 11

10. Abdomen with tergites two, four and five banded with yellow; first tergite very strongly punctured; third tergite with a small, lateral spot . . . . . *texanus*

Abdomen never banded, with a lateral spot on tergites two, four and five, the third tergite rarely spotted; first tergite not very strongly punctured . . . . . *stirpicolus*

11. Mesonotum with strong punctures, separated on posterior portion; abdominal spots nearly always all widely separated, rarely forming bands on the last two tergites; propodeum strongly punctured above (femora in part reddish, trochanters black) . . . . . *decemmaculatus*

Mesonotum closely and rather finely punctured throughout; abdomen always more or less banded; propodeum striated above 12

12. First tergite with the punctuation much more distinct than on the remaining tergites; first tergite and the sternites not spotted, *odyneroides*

First tergite with the punctuation but little more distinct than on the remaining tergites; femora black except the apex; sternites not maculated . . . . . *chrysargynus*

13. Head and abdomen rather finely punctured; mesonotum with the punctures close and not very coarse; propodeum not spotted; tibiae with a black spot within; basal half of femora usually black ....*dilectus*
Head and abdomen, particularly the first tergite, rather coarsely punctured; mesonotum coarsely cribrose; femora more or less reddish, *rufifemur*

Males

1. Anterior margin of clypeus produced into a strong, truncated process, not so prominently, however, as in the females 2
Anterior margin of clypeus not strongly produced medially, usually rounded 6
2. Flagellum entire, not dentate or emarginate, not broadened basally; sculpture very coarse on head and thorax; first joint of medial tarsi sinuated; fore tarsi slightly flattened 3
First three or four joints of flagellum produced into a huge tooth beneath; ocelli forming an equilateral triangle; pronotum rounded at the sides, not dentate 5
3. First dorsal abdominal segment basally much flattened, the flattened area bounded posteriorly by an obtuse elevation; second dorsal abdominal segment strongly depressed basally .....*planaris*
First two dorsal abdominal segments normal, not conspicuously flattened or depressed 4
4. Head between the ocelli and occiput covered with very large, deep, non-confluent punctures, those on the abdomen also strong, but less so than on the head; abdomen with one, more rarely with two or three terminal bands .....*interruptus*
Head between the ocelli and occiput with coarse, confluent punctures, less strong than in *interruptus,* those on the abdomen also finer and closer; abdomen with three, rarely with less, terminal bands..*bellus*
5. Joints one and two of flagellum with a huge tooth or production beneath, the third and fourth joints much less distinctly toothed, the combined length of the first two joints as great as that of joints three to six; fore femora black and yellow; sides of propodeum coarsely striated .....*obscurus*
Joints one to four of flagellum equally dentate beneath, the combined length of the first two joints not greater than that of joints three and four; fore femora rufous, striped with black and yellow, *nigrifrons*
6. Mesonotum not striated, either finely or rugosely punctured 7
Mesonotum striated, transversely on anterior portion, posteriorly longitudinally so (fore femora beneath armed with a sharp spine) .. 15
7. Abdomen above not distinctly punctured, or impunctate; first joint of the flagellum distinctly longer than the second; fore femora reddish anteriorly .....*sayi*

Abdomen above distinctly punctured, particularly the first segment 8

8. Fore tarsi not or but slightly flattened; the first joint of the medial tarsi not angular 9

Fore tarsi distinctly flattened; the first joint of the medial tarsi short, more or less angular 14

9. Antennae entire, subclavate, not emarginate; anterior trochanters armed with a strong spine or tooth beneath; sternites not marked with yellow .....*decemmaculatus*

Antennae more or less emarginate beneath 10

10. Head with large separated punctures; propodeum laterally, at least the posterior face, with a series of strong foveae 11

Head closely and rather finely punctured; propodeum without lateral foveae 13

11. Abdomen above, particularly the first two tergites, coarsely punctured; tergites two, four and five with yellow bands .....*texanus*

Abdomen strongly, though not coarsely punctured above; second tergite at least, with lateral spots 12

12. Tergites two, four and five with lateral spots; head with large, separated punctures .....*stirpicolus*

Tergites two and three with lateral spots, tergites four to six banded; head with large, somewhat confluent punctures .....*banksi*

13. First joint of flagellum not nearly as long as the two following joints united, not more than one quarter longer than the second; greater part of femora black; sternites not spotted .....*odyneroides*

First joint of flagellum nearly as long as the two following united, more than one quarter longer than the second (femora at apex broadly, and greater part of tibiae and tarsi, yellow)..*chrysargynus*

14. First joint of medial tarsi strongly angular on outer margin, shorter if anything than the following two joints united; sculpture of mesonotum not exceedingly coarse; prepectus usually with a yellow spot; tergites two to six of abdomen with a band; tibiae spotted internally, *dilectus*

First joint of medial tarsi but slightly angular on outer margin, slightly longer than the two following joints united; sculpture of mesonotum exceedingly coarse; prepectus not spotted .....*rufifemur*

15. Head finely punctured above, shining, not or indistinctly striated; pronotum declining strongly to the sides, not as wide as the occipital margin of head, widely, though not very strongly, furrowed; middle femora beneath and greater part of middle tibiae, black; no spots on scutellum .....*singularis*

Head strongly striato-punctate above, subopaque; pronotum declining but little toward the sides, as wide as the occipital margin of head, deeply furrowed; greater part of medial femora and their tibiae entirely, yellow; scutellum with yellow spots .....*trapezoidus*

Solenius (Protothyreopus) rufifemur (Packard).

1866. *Crabro rufifemur* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 81.
1895. *Crabro rufifemur* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 158.

Males 19, females 13: Omaha (4), Lincoln (8), Fairmont (1), West Point (5), Hardy (1), Mitchell (1), Gordon (2), Glen (8) and Harrison (2); June 24 to September 10; visits flowers of *Chamaecrista fasciculata, Petalostemum* sp., *Melilotus alba* and *Solidago* sp.

Solenius (Protothyreopus) dilectus (Cresson).

1865. *Crabro dilectus* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 478.
1895. *Crabro dilectus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 156.

Males 1: Harrison, August 4, 1908 (C. H. Gable); visits flowers of *Helianthus* sp.

Solenius (Clytochrysus) nigrifrons (Cresson).

1865. *Crabro nigrifrons* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 482.
1895. *Crabro nigrifrons* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 145.

Females 5: Omaha (2) and Monroe Canyon (3); July 7 to August 20.

Solenius (Clytochrysus) obscurus (F. Smith).

1856. *Crabro obscurus* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 418.
1895. *Crabro obscurus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 143.

Males 1, females 3: Omaha (3) and Ashland (1); May 28 to August 24.

Solenius (Xylocrabro) stirpicolus (Packard).

1866. *Crabro stirpicola* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 111.
1895. *Crabro stirpicolus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 148.

Males 3, females 9: Omaha (6), Lincoln (2), West Point (3) and South Sioux City (1); June 22 to August 20; visits flowers of *Chamaecrista fasciculata* and *Dicrophyllum* sp.

Solenius (Xestocrabro) sayi Cockerell.

1824. *Crabro sexmaculatus* Say, *Long's Expedition*, II, App., p. 341.
1895. *Crabro sexmaculatus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 146.
1916. *Solenius sayi* Rohwer, *Hym. of Conn.*, p. 667.

Males 8, females 9: Child's Point (1), Omaha (7), Ashland (1), Lincoln (2), York (1), West Point (1), Glen (1) and Warbonnet Canyon (3); May 9 to September 23; visits flowers of *Aster multiflorus*.

Solenius (subgenus?) **banksi** (Rohwer).

1909. *Crabro banksi* Rohwer, *Ent. News*, XX, p. 147.

Males 1, females 4: Omaha (4) and Hardy (1); July 16 to September; visits flowers of *Solidago* sp.

Solenius (Pseudocrabro) chrysargynus (LePeletier).

1834. *Crabro chrysargynus* LePeletier, *Ann. Soc. Ent. France*, III, p. 711.
1895. *Crabro chrysarginus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 155.
1908. *Crabro bigeminus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 403.

Males 1, females 3: Monroe Canyon (1) and Warbonnet Canyon (3); July 20 to August 7; visits flowers of *Melilotus* sp., *Petalostemum* sp. and *Malvastrum* sp.

Solenius (Pseudocrabro) odyneroides (Cresson).

1865. *Crabro odyneroides* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 481.
1895. *Crabro odyneroides* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 153.

Females 3: Glen (2) and Monroe Canyon (1); August 13 to 20; visits flowers of *Cleome serrulata*.

Solenius (Hypocrabro) decemmaculatus (Say).

1823. *Crabro decemmaculatus* Say, *West. Quart. Rep. Cincinnati*, II, p. 78.
1895. *Crabro decemmaculatus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 151.

Males 2, females 2: Omaha (4); August 3 to 20; visits flowers of *Chamaecrista fasciculata*.

Solenius (Lophocrabro) trapezoidus (Packard).

1866. *Crabro trapezoidus* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 89.
1895. *Crabro trapezoidus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 160.

Males 1: Omaha, July 22, 1913 (L. T. Williams).

Solenius (Lophocrabro) singularis (F. Smith).

1856. *Crabro singularis* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 417.

1895. *Crabro singularis* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 159.
1895. *Crabro maculatus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 204.
1916. *Solenius singularis* Rohwer, *Hym. of Conn.*, p. 667.

Males 2, females 2: Child's Point (2) and Omaha (2); July 14 to August 28.

Solenius (Solenius) texanus (Cresson).

1872. *Crabro texanus* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 227.
1895. *Crabro texanus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 150.

Males 1: Omaha, July 16, 1914 (L. T. Williams); visits flowers of *Chamaecrista fasciculata.*

Solenius (Solenius) planaris (Mickel).

1916. *Crabro planaris* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 427.

Males 1: Monroe Canyon, August 17, 1908 (R. W. Dawson).

Solenius (Solenius) bellus (Cresson).

1865. *Crabro bellus* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 481.
1895. *Crabro bellus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 137.

Males 2: Glen (2), August 17 and 19.

Solenius (Solenius) interruptus LePeletier.

1834. *Solenius interruptus* LePeletier, *Ann. Soc. Ent. France*, III, p. 716.
1895. *Crabro interruptus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 136.

Males 37, females 29: Child's Point (1), Omaha (11), Weeping Water (1), Louisville (1), Meadow (1), South Bend (3), Lincoln (12), Fairmont (1), West Point (1), Holt county (1), Curtis (1), Bridgeport (1), Mitchell (1), Glen (14), Monroe Canyon (2), Sowbelly Canyon (1), Jim Creek (1), Warbonnet Canyon (2) and Sioux county (4); May 27 to October 12; visits flowers of *Chamaecrista fasciculata, Solidago canadensis, Solidago glaberrima, Ceanothus americanus, Melilotus alba, Symphoricarpos* sp. and *Astragalus* sp.

Crabro Fabricius

KEY TO THE SPECIES

Females

1. Abdomen always spotted and marked 2
   Abdomen never spotted, entirely black, or red 11

2. First joint of hind tarsi distinctly longer than the longer spur of hind tibiae 3
   First joint of hind tarsi of about equal length to the longer spur of hind tibiae 10
3. First cubital transverse vein received by the marginal cell before its middle, the space between the recurrent nervure and the apex of the submarginal cell much greater than the width of the latter cell at the apex 4
   First cubital transverse vein received in about the middle of the marginal cell, the space between the recurrent nervure and apex of submarginal cell not or rarely greater than the width of the latter cell at apex 5
4. Pronotum with lateral tooth small and weak; pronotum entirely, scutellum and metanotum in part, yellow; second and third sternites spotted with yellow .....*cingulatus*
   Pronotum with lateral tooth strong; pronotum with two, sinuous yellow spots only; no yellow on scutellum, netanotum or sternites, *argus*
5. Flagellum scarcely twice the length of the scape, about equal to the space between the eyes on an imaginary line drawn across the vertex before the hind ocelli; mesepisterna not striated; hind tarsi yellowish testaceous .....*tumidus*
   Flagellum more than twice longer than the scape, greater in length than the space between the eyes on an imaginary line drawn across the vertex before the hind ocelli 6
6. Scutellum of head and thorax subtile, sparsely punctate, granulate between the punctures; propodeum finely striated above; scutellum black (not yellow) .....*bruneri*
   Sculpture of head and thorax, particularly that of the mesonotum, well marked 7
7. Propodeum above very coarsely sculptured; with strong longitudinal or somewhat oblique ridges, which extend to base of posterior face; pronotum distinctly dentate laterally; scape yellow, at least anteriorly; first sternite with two separate spots .....*advenus*
   Propodeum above not so coarsely sculptured; if it is, then the ridges become obsolete towards the posterior face (in one case with close, rather fine, longitudinal striae; markings yellow) 8
8. Space between hind ocelli decidedly less than that between them and the nearest eye margin; propodeum with a well marked, triangular enclosure, which is longitudinally and closely striated; mesepisterna above in addition to the puncturation, distinctly striated; mesonotum very compactly punctured (first sternite with a band; extreme tips of femora yellow) .....*pleuralis*
   Space between hind ocelli not much less than that between them and

the nearest eye margin; propodeum without a well-marked enclosure, the furrows forming it obsolete basally; mesepisterna not striated; mesonotum with the punctures more or less separated; hind tarsi yellow testaceous 9

9. Thorax with thick, matted pubescence of a pale fuscous color; length 14 mm. or over ..... *largior*

Thorax with thin pale, grayish pubescence; length 10 mm. or less, *vicinus*

10. Propodeum above with the central, longitudinal furrow wide, shallow, and much broadened basally, the furrow which margins the lateral ridges of posterior face outwardly not or indistinctly foveolate; prepectus entirely black ..... *cognatus*

Propodeum above with the central, longitudinal furrow narrower, deep, scarcely broadened basally, the furrow which margins the lateral ridges of posterior face outwardly, distinctly foveolate or marked by strong, transverse ridges; prepectus more or less yellow.. *hilaris*

11. Pygidium broad, flat, not excavated 12

Pygidium narrowed apically and excavated 16

12. Abdomen largely red, black apically ..... *viereckí*

Abdomen entirely black 13

13. Mandibles yellow in greater part; scutellum immaculate; the two convexities of the enclosed area of propodeum with microscopic striations, opaque ..... *minimus*

Mandibles not yellow, black, reddish apically 14

14. Scutellum black or with a minute spot; the intermediate tibiae yellow on basal portion only; yellow on pronotum broken into two, widely-separated spots; first joint of posterior and intermediate tarsi yellow ..... *incavus*

Scutellum almost entirely yellow (rarely black), as is likewise the outer side of intermediate tibiae; yellow on pronotum forming a continuous band 15

15. Abdomen somewhat longer than head and thorax united, the first segment not broad and narrowed basally; episternal furrow of mesopleurae forming an angle at about its middle; length 6 mm., *scutellifer*

Abdomen a little shorter than head and thorax united, the first segment broad; episternal furrow of mesopleurae gently curved; length 4.5–5 mm. ..... *lentus*

16. Pronotum and scutellum yellow; apical margins of abdominal segments broadly testaceous ..... *impressifrons*

Thorax not maculated with yellow 17

17. Enclosure of propodeum very strongly marked, the impressed lines forming it more or less foveolate; length 7.5 mm..... *stygius*

Enclosure of propodeum not strongly marked, rather indistinct, the

lines forming it not foveolate; pronotum with a small, blunt prominence laterally; all the tarsi brownish .....*nigricornis*

Males

1. Abdomen always spotted or marked with yellowish 2
   Abdomen not spotted, entirely black; ocelli forming an equilateral triangle 11
2. Fore tibiae bearing a large vari-shaped shield 3
   Fore tibiae without a shield, simple; pronotum strongly dentate laterally 9
3. Antennae more or less dilated, the joints more or less prolonged beneath; fifth joint of fore tarsi with a peculiar appendage 4
   Antennae simple, fifth joint of fore tarsi without an appendage ... 7
4. First joint of flagellum not broadened to meet the second, not longer, though broader, than the pedicel, the four terminal joints together about as long as the three preceding ones united, joints 2–6 with a large appendix on outer margin, that on joint 2 narrowest and most curved, that on joint 6 broadest and not curved (tibial shield brownish, yellow basally, covered with pale dots, which are at extreme base and apex, linear; scutellum and metanotum black; first abdominal tergite banded; intermediate legs, coxae excepted, entirely yellow, the first joint of their tarsi about twice as long as the remaining tarsal joints united) .....*argus*
   First joint of flagellum broadened to meet the second, longer than the pedicel, the four terminal joints as long as or longer than the four preceding joints united, none of the joints with a long, acute appendix on outer margin 5
5. First joint of flagellum not hirsute beneath; tibial shield very large, fully two thirds as long as the thorax .....*latipes*
   First joint of flagellum with a bunch of pale, curled hair beneath.. 6
6. Anterior femora at the base of outer margin with a strong production, which is somewhat bifurcate at apex; space between hind ocelli much less than that between them and the nearest eye-margin; tibial shield basally yellow, posteriorly greenish, and streaked and dotted with yellow .....*pleuralis*
   Anterior femora at base of outer margin with a sharp tooth; space between hind ocelli but little less than that between them and the nearest eye-margin; tibial shield in greater part deep black, basally greenish and with broken streaks of yellow .....*largior*
7. Flagellum short, stout, not much more than twice the length of the scape; mesosternum naked; mesepisterna sparsely and rather subtilely punctured; fore femora beneath yellow and greater part of tibiae of that color; metanotum black .....*tumidus*
   Flagellum long, slender, at least three times as long as the scape .. 8

8. Head and thorax subtilely punctured, clothed with unusually long pubescence; cheeks not keeled beneath; tibial shield broader than long, yellowish on anterior half, more or less whitish on posterior half ..... *bruneri*

   Head and thorax coarsely sculptured, not pubescent more than usual; cheeks beneath along the eye-margin with a slight keel; clypeus yellow; tibial shield dark brown, darker anteriorly, marked with numerous, fine, yellowish streaks ..... *advenus*

9. Scape of antennae cylindrical, not broader at apex than at base, flagellum tolerably slender, slightly subclavate; mesosternum with short, sparse, pale silvery pubescence, wings fusco-hyaline... *hilaris*

   Scape of antennae compressed, broader by far at the apex than at the base, flagellum stout, not thickened medially nor clavate; mesosternum with long, dense, white hair, wings hyaline 10

10. Abdomen but little longer than head and thorax united, the sixth tergite rarely spotted with yellow; fore femora beneath, towards base, with sparse, not long, white pubescence, at least not as long nor as dense as that on the mesosternum laterally (fore and intermediate femora marked more or less with black) ..... *cognatus*

    Abdomen nearly twice as long as the head and thorax united, the sixth tergite always spotted with yellow; fore femora beneath with dense, white pubescence, as long and as dense as that on the mesosternum laterally (fore and intermediate legs entirely yellow) .... *cingulatus*

11. Fore tarsi greatly flattened; prothorax, tubercles and scutellum marked with yellow ..... *planipes*

    Fore tarsi not flattened or distorted 12

12. Ultimate tergite distinctly more strongly punctured than the penultimate; posterior face of propodeum transversely rugose; clypeus and greater part of scape, prosternum and fore coxae and trochanters, black; "at the base of propodeum is a row of minute fossae," *minimus*

    Ultimate tergite not, or scarcely, more strongly punctured than the penultimate 13

13. Thorax without yellow spots; enclosure of propodeum with two large, smooth areas; greater part of four anterior legs reddish; hind tarsi dark testaceous ..... *nigricornis*

    Prothorax and scutellum yellow ..... *impressifrons*

Crabro (Hoplocrabro) vierecki H. S. Smith.

1908. *Crabro vierecki* H. S. Smith, Univ. Nebr. Studies, VIII, p. 401.

Females 2: Glen, August 13, 1906 (H. S. Smith), and Monroe Canyon, August 20, 1908 (R. W. Dawson).

The latter specimen has been collected since the species was described.

Crabro (Stenocrabro) planipes Fox.

1895. *Crabro planipes* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 193.

Males 1: Lincoln, May 16, 1908.

Crabro (Crossocerus) lentus Fox.

1895. *Crabro lentus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 190.

Females 5: Omaha (3), Lincoln (1) and West Point (1); June 20 to August 28.

Crabro (Crossocerus) scutellifer Dalle Torre.

1824. *Crabro scutellatus* Say, *Long's Expedition*, II, App., p. 341 (nec Scheven).

1895. *Crabro scutellatus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 190.

Females 2: Glen (2); August 13, 1906 (H. S. Smith).

Crabro (Crossocerus) minimus (Packard).

1867. *Blepharipus minimus* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 377.

1895. *Crabro minimum* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 188.

Females 2: Omaha (2); August 17, 1913, and August 25, 1914 (L. T. Williams); visits flowers of *Solidago canadensis*.

Crabro (Crossocerus) incavus Fox.

1895. *Crabro incavus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 188.

Females 1: West Point.

Crabro (Blepharipus) nigricornis (Provancher).

1888. *Blepharipus nigricornis* Provancher, *Add. Hym. Quebec*, p. 294.

1895. *Crabro nigricornis* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 195.

Females 2: Monroe Canyon (2); June 30, 1911, and August 19, 1912 (R. W. Dawson).

Crabro (Blepharipus) impressifrons F. Smith.

1824. *Crabro tibialis* Say, *Long's Second Expedition*, App., p. 340 (nec Fabricius).

1856. *Crabro impressifrons* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 417.

1895. *Crabro impressifrons* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 194.

Males 1, females 1: Omaha (1) and Falls City (1); August 20, 1913 (L. T. Williams), and April 28, 1904 (M. H. Swenk).

Crabro (subgenus?) **Stygius** (Mickel).

1916. *Thyreopus stygius* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 422.

Females 1: Bad Lands at the Mouth of Monroe Canyon, May 28, 1901 (L. Bruner); visits flowers of *Astragalus* sp.

Crabro (Thyreopus) vicinus Cresson.

1865. *Crabro vicinus* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 479.
1895. *Crabro vicinus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 170.

Females 4: Mitchell (1), Warbonnet Canyon (1) and Sioux county (2); Mitchell specimen taken June 23, 1914 (L. M. Gates).

Crabro (Thyreopus) argus (Packard).

1867. *Thyreopus argus* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 359.
1895. *Crabro argus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 165.

Males 1: Glen, August 12, 1906 (P. R. Jones); visits flowers of *Cleome* sp.

Crabro (Thyreopus) latipes F. Smith.

1856. *Crabro latipes* F. Smith, *Cat. Hym. Brit. Mus.*, IV., p. 396.
1895. *Crabro latipes* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 169.

Males 2: Lincoln (1) and Warbonnet Canyon (1).

Crabro (Thyreopus) largior Fox.

1895. *Crabro largior* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 161.

Males 2, females 4: Lincoln (1), Monroe Canyon (1) and Warbonnet Canyon (4); June 8 to August 3; visits flowers of *Astragalus* sp.

Crabro (Thyreopus) pleuralis Fox.

1895. *Crabro pleuralis* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 162.

Males 2: Monroe Canyon, August 16, 1912 (R. W. Dawson), and Warbonnet Canyon.

Crabro (Synothyreopus) tumidus (Packard).

1867. *Thyreopus tumidus* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 364.
1895. *Crabro tumidus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 175.

Males 3, females 2: Omaha (5); August 17 to September 8; visits flowers of *Solidago canadensis*.

Crabro (Synothyreopus) bruneri (Mickel).

1916. *Thyreopus bruneri* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 422.

Males 5, females 7: Warbonnet Canyon (2) and Sioux county (9); May.

Crabro (Synothyreopus) advenus F. Smith.

1856. *Crabro advenus* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 421.
1895. *Crabro advenus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 171.

Males 4, females 6: Omaha (2), Weeping Water (1), Lincoln (4), West Point (2) and Glen (1); June 18 to September 3.

Crabro (Paranothyreus) hilaris F. Smith.

1856. *Crabro (Thyreopus) hilaris* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 416.
1895. *Crabro hilaris* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 179.

Females 6: Lincoln (4) and West Point (2); June 20 to October.

Crabro (Paranothyreus) cognatus Fox.

1895. *Crabro cognatus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 178.

Females 6: Lincoln (1), Mitchell (4) and Harrison (1); August 5 to August 30.

Crabro (Paranothyreus) cingulatus (Packard).

1867. *Thyreopus cingulatus* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 366.
1895. *Crabro cingulatus* Fox, *Trans. Amer. Ent. Soc.*, XXII, p. 177.

Males 1, females 4: Lincoln (1), West Point (1), Haigler (1), Glen (1) and Monroe Canyon (1); June 7 to August 20.

PHILANTHINAE

KEY TO THE GENERA

1. Eyes entire within; submedian cell of posterior wings much shorter than the median on the median vein; female with a distinct pygidial area ..... *Apilanthops*

   Eyes more or less emarginate within; submedian cell of posterior wings as long or slightly longer than the median on the median vein; female without a pygidial area 2

2. Femora hairy below only; eyes of male not approximate above, *Philanthus*

   Femora hairy all over; eyes of male approximate above .... *Ococletes*

Philanthus Fabricius

KEY TO THE SPECIES

1. Punctures of abdomen normal, or fine and shallow 2
   Punctures of abdomen coarse and deep 13
2. Large species, 16–18 mm. 3
   Small species, 7–10 mm. 4
3. Dorsal segments of abdomen with broad yellow bands, emarginate anteriorly; legs entirely reddish-yellow .....*gloriosus*
   Dorsal segments of abdomen with narrow yellow bands, that on the first segment somewhat wider; legs black and yellow .....*solivagus*
4. Body covered with rather long, conspicuous silvery pubescence 5
   Body very sparsely covered with short pubescence 6
5. Puncturation of abdomen very fine; body thickly covered with long silvery pubescence .....*albopilosus*
   Puncturation of abdomen not fine; the punctures of moderate size and quite sparse; body sparsely covered with long silvery pubescence, *barbiger*
6. Mesonotum and abdomen impunctate, highly polished; second dorsal abdominal segment with two broad lunate marks .....*bilunatus*
   Mesonotum and abdomen punctured 7
7. Femora red and yellow .....*siouxensis*
   Femora black and yellow, or entirely black 8
8. Clypeus with a black spot on each side .....*simillimus*
   Clypeus entirely yellow 9
9. Yellow line on pronotum widely interrupted in the middle .....*politus*
   Yellow line on pronotum continuous 10
10. Basal joint of hind tarsi distinctly yellow 11
    Basal joint of hind tarsi distinctly rufous or blackish 12
11. Abdomen with fine, moderately close punctures; face usually entirely yellow .....*pacificus*
    Abdomen with large, sparse punctures; face with a large yellow spot above the insertion of the antennae .....*pulcher*
12. Hind tarsi mostly rufous; wings clear, whitish .....*psyche*
    Hind tarsi mostly black; wings tinged with fuscous .....*tarsatus*
13. Propodeum with yellow markings 14
    Propodeum without yellow markings 16
14. Yellow spot between and above antennae reaching but little more than half way from the clypeus to lower ocellus.....*flavifrons*
    Yellow spot between and above antennae reaching the entire distance between the base of the clypeus and the lower ocellus 15
15. Face above the clypeus entirely yellow; venter of abdomen for the most part yellow; mesonotum usually with four longitudinal stripes (sometimes almost obsolete in male) .....*inversus*

Face with a campanulate yellow spot above the antennae; mesonotum without longitudinal stripes ..... *crabroniformis*
16. Vertex with sparse, coarse punctures ..... *gibbosus*
Vertex closely and deeply punctured 17
17. Band on first tergite widely interrupted ..... *vertilabris*
Band on first segment of abdomen continuous ..... var. *frontalis*

Philanthus gloriosus Cresson.

1865. *Philanthus gloriosus* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 86.
1866. *Philanthus gloriosus* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 55.

Females 4: Lincoln (1), Mitchell (2) and Bad Lands, Sioux county (1); July to August 10, 1908; visits flowers of *Melilotus alba.*

Philanthus solivagus Say.

1837. *Philanthus solivagus* Say, *Bost. Journ. Nat. Hist.*, I, p. 383.
1897. *Philanthus solivagus* Dunning, *Ent. News*, VIII, p. 70.

Females 1: Monroe Canyon, August 23, 1908 (R. W. Dawson).

Philanthus albopilosus Cresson.

1865. *Philanthus albopilosus* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 91.
1866. *Philanthus albopilosus* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 56.

Males 4: Omaha (2) and Mitchell (2); July 29 to September 3; visits flowers of *Solidago glaberrima* and *Solidago* sp.

Philanthus barbiger Mickel.

1916. *Philanthus barbiger* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 405.

Males 33: Harrison (32) and Glen (1); August 4 to August 17; visits flowers of *Helianthus* sp., *Solidago* sp. and *Chrysothamnus* sp.

Philanthus bilunatus Cresson.

1865. *Philanthus bilunatus* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 97.

Males 44, females 42: Omaha (37), Louisville (2), Weeping Water (1), Lincoln (2), Carns (1), Glen (24), Monroe Canyon (16) and Warbonnet Canyon (1); July 4 to August 22; visits flowers of *Solidago* sp., *Melilotus alba, Achillea millefolium, Chamaecrista fasciculata, Aster multiflorus, Symphoricarpos symphoricarpos, Monarda* sp., *Mentzelia* sp. and *Helianthus* sp.

Philanthus siouxensis Mickel.

1916. *Philanthus siouxensis* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 406.

Females 12: Mitchell (7), Glen (3), Harrison (1) and Warbonnet Canyon (1); July 17 to August 17; visits flowers of *Cleome serrulata, Petalostemum* sp. and *Melilotus alba.*

Philanthus simillimus Cresson.

1865. *Philanthus simillimus* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 95.

Females 3: Omaha, August 22, 1914 (L. T. Williams), on *Aster multiflorus;* Omaha, September 5, 1913 (L. T. Williams); and Child's Point, September 3, 1914 (E. M. Partridge).

Philanthus politus Say.

1824. *Philanthus politus* Say, *Long's Exped.*, II, App., p. 342.
1859. *Philanthus politus* Say, *Leconte edition*, I, pp. 113, 232.
1865. *Philanthus politus* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 94.

Females 2: Omaha, July 17, 1914 (L. T. Williams), and July 30, 1914 (L. T. Williams, visits flowers of *Chamaecrista fasciculata.*

Philanthus pacificus Cresson.

1879. *Philanthus pacificus* Cresson, *Trans. Amer. Ent. Soc.*, VII, p. xxxii.
1904. *Philanthus pacificus* Viereck and Cockerell, *Journ. New York Ent. Soc.*, XII, p. 144.

Males 9: Bridgeport (2), Harrison (2), Glen (4) and Monroe Canyon (1); June 26 to August 19.

Philanthus pulcher Dalle Torre.

1865. *Philanthus pulchellus* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 93.
1893. *Philanthus pulcher* Dalle Torre, *Cat. Hymen.*, VII, p. 489.
1904. *Philanthus pulchellus* Viereck and Cockerell, *Journ. New York Ent. Soc.*, XII, p. 144.
1908. *Philanthus politus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 356.

Males 1, females 4: Warbonnet Canyon (2) and Sioux county (3); July 21; visits flowers of *Borage* sp.

Philanthus psyche Dunning.

1896. *Philanthus psyche* Dunning, *Ent. News*, VII, p. 287.

1904. *Philanthus psyche* Viereck and Cockerell, *Journ. New York Ent. Soc.*, XII, p. 143.
1908. *Philanthus psyche* H. S. Smith, Univ. Nebr. Studies, VIII, p. 355.

Females 13: Mitchell (1), Glen (11) and Monroe Canyon (1); July 1 to August 20; visits flowers of *Mentzelia* sp. and *Gutierrezia sarothrae.*

Philanthus tarsatus H. S. Smith.

1908. *Philanthus tarsatus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 356.

Females 4: Halsey (1) and Glen (3); August 17 to 20; visits flowers of *Cleome serrulata* and *Solidago* sp.

Two of these specimens have been taken since the species was described.

Philanthus flavifrons Cresson.

1865. *Philanthus flavifrons* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 102.

Females 14: Mitchell (12) and Indian Creek (2); July 2 to August 16; visits flowers of *Helianthus petiolaris* and *Malva* sp.

Philanthus inversus Patton.

1879. *Philanthus inversus* Patton, *Bull. U. S. Geol. Surv.*, V, p. 355.
?1879. *Philanthus sublimis* Cresson, *Trans. Amer. Ent. Soc.*, VII, p. xxxii.
1908. *Philanthus inversus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 358.

Males 26, females 7: Lincoln (2), Mitchell (12), Glen (14), Monroe Canyon (1), Bad Lands (2) and Warbonnet Canyon (1); July 13 to September 2; visits flowers of *Solidago* sp.

Philanthus crabroniformis F. Smith.

1855. *Philanthus crabroniformis* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 474.
1904. *Philanthus crabroniformis* Viereck and Cockerell, *Journ. New York Ent. Soc.*, XII, p. 143.

Males 11, females 2; Lincoln (1), Mitchell (1), Glen (9), Bad Lands (1) and Indian Creek (1); August and September; visits flowers of *Solidago* sp.

Philanthus gibbosus (Fabricius).

1775. *Vespa gibbosa* Fabricius, *Syst. Ent.*, p. 370.
1859. *Philanthus punctatus* Say, *Leconte Ed.*, I, p. 231.
1865. *Philanthus punctatus* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 100.
1891. *Philanthus gibbosus* Kohl, *Annalen naturhistorischen Hofmuseums*, Wien, VI, p. 348.

Males 118, females 84: Omaha (125), Child's Point (4), South Sioux City (1), South Bend (8), Weeping Water (1), Lincoln (6), West Point (13), Curtis (4), Bridgeport (1), Mitchell (3), Crawford (1), Glen (22), Monroe Canyon (1) and Warbonnet Canyon (2); June 22 to September 19; visits flowers of *Melilotus alba, Chamaecrista fasciculata, Solidago canadensis, Aster multiflorus, Helianthus* sp., *Petalostemum* sp., *Ceanothus americanus* and *Cleome serrulata.*

Philanthus vertilabris Fabricius.

1804. *Philanthus vertilabris* Fabricius, *Syst. Piez.*, p. 303.
1865. *Philanthus vertilabris* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 98.

Males 22, females 57: Omaha (22), Lincoln (1), Fairmont (2), Mitchell (43), Harrison (2), Glen (6) and Monroe Canyon (3); June 23 to September 9; visits flowers of *Melilotus alba, Chamaecrista fasciculata* and *Cleome serrulata.*

Philanthus vertilabris frontalis Cresson.

1865. *Philanthus frontalis* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 99.
1879. *Philanthus ventilabris frontalis* Patton, *Bull. U. S. Geol. Surv.*, V, p. 355.

Males 44: Omaha (7), Louisville (1), Lincoln (1), Fairmont (2), Red Cloud (1), Sidney (1), Mitchell (30) and Pine Ridge (1); June 18 to August 26; visits flowers of *Solidago canadensis, Solidago glaberrima* and *Euphorbia* sp.

Ococletes Banks

KEY TO THE SPECIES

1. Ground color of basal abdominal segment red ..... *basilaris*
   Ground color of basal abdominal segment black 2
2. Distance between two posterior ocelli of male equal to the distance between them and the nearest eye-margin; femora of female testaceous ..... *sanborni*

Eyes of male at the vertex almost touching the posterior ocelli, *scutellaris*

Ococletes basilaris (Cresson).

1879. *Philanthus basilaris* Cresson, *Trans. Amer. Ent. Soc.*, VII, p. xxxiii.

Males 10, females 3: Harrison (4), Glen (6) and Hat Creek Basin (1); August 4 to 23; visits flowers of *Helianthus* sp.

Ococletes sanborni (Cresson).

1865. *Philanthus sanbornii* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 89.
1908. *Philanthus gloriosus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 359 (in part).

Males 10, females 7: South Sioux City (2), Lincoln (1), West Point (2), Mitchell (7), Glen (2) and Bad Lands (2); June 25 to August 22; visits flowers of *Melilotus alba*.

Ococletes scutellaris (Cresson).

1879. *Philanthus scutellaris* Cresson, *Trans. Amer. Ent. Soc.*, VII, p. xxxiv.
1908. *Philanthus sanbornii* H. S. Smith, Univ. Nebr. Studies, VIII, p. 359.

Males 11: South Bend (2), Lincoln (1), West Point (1), Halsey (2) and Mitchell (5); June 28 to August 12; visits flowers of *Melilotus alba*.

Aphilanthops Patton

KEY TO THE SPECIES

1. Ground color of abdomen red; head and thorax with silvery pubescence; legs red ..... *quadrinotatus*
   Ground color of abdomen black; legs black and yellow or testaceous and yellow 2
2. Size small, length 6–8 mm.; face with dense silvery pubescence; legs black and yellow; abdomen with bands broad, occupying two thirds of the segment, and not interrupted ..... *laticinctus*
   Size larger, length 9–13 mm.; face with sparse pubescence; legs testaceous and yellow in female, black or piceous and yellow in male; bands narrower and more interrupted ..... *frigidus*

Aphilanthops quadrinotatus Ashmead.

1890. *Aphilanthops quadrinotatus* Ashmead, *Bull. Col. Biol. Assoc.*, I, p. 7.

1898. *Aphilanthops quadrinotatus* Dunning, *Trans. Amer. Ent. Soc.*, XXV, p. 24.

Females 16: Ogallala (1), Bridgeport (1), Harrison (1) and Glen (13); June 24 to August 21; visits flowers of *Solidago* sp., *Helianthus petiolaris* and *Gutierrezia sarothrae*.

Aphilanthops laticinctus (Cresson).

1865. *Philanthus laticinctus* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 91.
1898. *Aphilanthops laticinctus* Dunning, *Trans. Amer. Ent. Soc.*, XXV, p. 22.

Males 26: Ogallala (3), Bridgeport (6) and Glen (17); June 24 to August 21.

Aphilanthops frigidus (F. Smith).

1856. *Philanthus frigidus* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 457.
1898. *Aphilanthops frigidus* Dunning, *Trans. Amer. Ent. Soc.*, XXV, p. 20.
1912. *Nomada* (*Holonomada*) *dawsoni* Swenk, Univ. Nebr. Studies, XII, p. 83.
1915. *Nomada* (*Holonomada*) *dawsoni* Swenk, Univ. Nebr. Studies, XV, p. 172.

Males 30, females 12: Omaha (2), West Point (9), Ogallala (1), Bridgeport (23), Glen (3) and Monroe Canyon (1); June 24 to August 23; visits flowers of *Melilotus alba* and *Chrysothamnus* sp.

TRYPOXYLONINAE

Trypoxylon Latreille

KEY TO THE SPECIES

1. Females 2
   Males 11
2. Propodeum not trisulcate 3
   Propodeum trisulcate 10
3. Abdomen entirely black 4
   Abdomen banded with reddish 7
4. Propodeum punctured or with very fine striations; size large, 18–25 mm. 5
   Propodeum more or less striated or rugose 6
5. Wings fuliginous, thorax with black pile ..... *politum*
   Wings with anterior pair fuscous, posterior ones except apex hyaline; thorax with pale pubescence ..... *albipilosum*

6. Propodeum with an enclosed space; wings except apical margin hyaline; posterior tarsi whitish medially; mesonotum shining..*clavatum*
   Propodeum without an enclosed space; upper surface of propodeum rugose; mesonotum opaque .....*frigidum*
7. Propodeum punctured .....*rubrocinctum*
   Propodeum more or less striated 8
8. Front with a strong projection; anterior half of clypeus strongly carinated .....*tridentatum*
   Front with a longitudinal carina above the antennae 9
9. Antennae entirely black; second abdominal segment only red, *rufozonale*
   Antennae, except apical portion, reddish fulvous; first abdominal segment more or less, and second entirely red; thorax black, with golden pubescence .....*texense*
10. Abdomen with base of second and third abdominal segments reddish fulvous .....*johnsoni*
    Abdomen entirely black; upper surface of propodeum with a raised disk which is transversely striated .....*fastigium*
11. Propodeum trisulcate; upper surface of propodeum with a raised disk which is transversely striated .....*fastigium*
    Propodeum not trisulcate 12
12. Abdomen entirely black 13
    Abdomen banded with reddish 16
13. Propodeum punctured or very finely striated 14
    Propodeum striated or rugose 15
14. First sternite with a strong hook or spine; thorax with black pile, *politum*
    First sternite unarmed; thorax with pale pubescense .....*albipilosum*
15. Posterior trochanters armed with a spine; mesonotum shining, *clavatum*
    Posterior trochanters unarmed; mesonotum opaque .....*frigidum*
16. Posterior trochanters unarmed 17
    Posterior trochanters armed with a spine 18
17. Propodeum punctate; base of second segment reddish...*rubrocinctum*
    Propodeum striated; with two strong projections at the apex, *tridentatum*
18. Antennae entirely black; legs black, the hind tarsi whitish medially, *rufozonale*
    Antennae more or less reddish; thorax black with golden pubescence; legs reddish .....*texense*

Trypoxylon politum Say.

1837. *Trypoxylon politus* Say, *Bost. Journ. Nat. Hist.*, I, Pt. 4, p. 373.
1883. *Trypoxylon neglectum* Kohl, *Verh. zoöl. bot. Ges. Wien.*, XXXIII, p. 340.

1893. *Trypoxylon albitarse* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 474.
1908. *Trypoxylon albitarse* H. S. Smith, Univ. Nebr. Studies, VIII, p. 352.
1912. *Trypoxylon politum* Rohwer, *Proc. U. S. Nat. Mus.*, XLI, p. 473.

Males 4, females 4: Nebraska City (3) and Lincoln (5).

Bred from nests; Lincoln specimens emerged in March; Nebraska City specimens emerged May 25 and June 1.

Trypoxylon albipilosum Fox.

1891. *Trypoxylon albopilosum* Fox, *Trans. Amer. Ent. Soc.*, XVIII, p. 139.
1893. *Trypoxylon albipilosum* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 474.

Males 2, females 1: Omaha (3); June 26 to July 15.

Trypoxylon clavatum Say.

1837. *Trypoxylon clavatus* Say, *Bost. Journ. Nat. Hist.*, I, Pt. 4, p. 374.
1893. *Trypoxylon clavatum* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 474.

Males 6, females 2: Omaha (8); July 8 to August 17.

Trypoxylon frigidum F. Smith.

1856. *Trypoxylon frigidum* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 381.
1893. *Trypoxylon frigidum* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 474.

Females 6: Omaha (5) and Warbonnet Canyon (1); July 20 to August 25.

Trypoxylon rubrocinctum Packard.

1867. *Trypoxylon rubrocinctum* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 416.
1893. *Trypoxylon rubrocinctum* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 474.

Males 2, females 1: Lincoln (3); July 17 to August 3.

Trypoxylon tridentatum Packard.

1867. *Trypoxylon tridentatum* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 417.
1893. *Trypoxylon tridentatum* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 475.

Males 6, females 6: Omaha (3), Glen (8) and Monroe Canyon (1); July 14 to August 20; visits flowers of *Chamaecrista fasciculata*.

Trypoxylon rufozonale Fox.

1891. *Trypoxylon rufozonalis* Fox, *Trans. Amer. Ent. Soc.*, XVIII, p. 145.

1893. *Trypoxylon rufozonale* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 475.

Males 3, females 4: Glen (2) and Monroe Canyon (5); August 3 to August 20.

Trypoxylon texense Saussure.

1867. *Trypoxylon texense* Saussure, *Reis d. Novara*, Zoöl., II, *Hym.*, p. 77.

1877. *Trypoxylon sulcus* La Munyon, *Proc. Nebr. Assoc. Adv. Sc.*, March, 1877.

1893. *Trypoxylon texense* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 475.

Males 3: Culbertson (2), August 20, 1889 (F. C. Kenyon), and Glen (1), August 14, 1906.

The type of *Trypoxylon sulcus* La Munyon is lost, but that species is evidently the same as *texense* and should be considered synonymous.

Trypoxylon johnsoni Fox.

1891. *Trypoxylon Johnsoni* Fox, *Trans. Amer. Ent. Soc.*, XVIII, p. 147.

1893. *Trypoxylon Johnsonii* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 475.

Females 1: Omaha, August 17, 1914 (L. T. Williams).

Trypoxylon fastigium Fox.

1891. *Trypoxylon carinifrons* Fox, *Trans. Amer. Ent. Soc.*, XVIII, p. 142.

1893. *Trypoxylon fastigium* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 476.

1908. *Trypoxylon frigidium* H. S. Smith (nec F. Smith), Univ. Nebr. Studies, VIII, p. 352.

Males 1, females 1: Omaha (1), July 25, 1914 (L. T. Williams); and Glen (1), August 13, 1906 (H. S. Smith).

MELLININAE

KEY TO THE GENERA

Cubitus in hind wings originating beyond the transverse median nervure; front wings with the second cubital cell receiving both recurrent nervures ..... *Mellinogastra*

Cubitus in hind wings interstitial with the transverse median nervure; second cubital cell receiving both recurrent nervures; enclosure of middle segment striated ..... *Hypomellinus*

Cubitus in hind wings originating far before the transverse median nervure; front wings with the first and third cubital cells each receiving a recurrent nervure .....*Mellinus*

Mellinogastra Ashmead

Mellinogastra mellinoides (Fox).

1895. *Gorytes mellinoides* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 524.

Females 1: Monroe Canyon, August 19, 1912 (R. W. Dawson). This specimen differs from Fox's description in having no yellow on the apical margin of the third tergite and second sternite. It may prove to be a distinct species.

Mellinogastra williamsi Mickel.

1916. *Mellinogastra williamsi* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 402.

Males 1: Omaha, August 17, 1914 (L. T. Williams).

Hypomellinus Ashmead

Hypomellinus venustus Mickel.

1916. *Hypomellinus venustus* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 403.

Males 2: Omaha (1) and Harrison (1); June 14 and August 12; visits flowers of *Chamaecrista fasciculata.*

Hypomellinus tricinctus Mickel.

1916. *Hypomellinus tricinctus* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 404.

Females 3: Omaha (3); August 3 to 5; visits flowers of *Chamaecrista fasciculata.*

Mellinus Fabricius

KEY TO THE SPECIES

At least three basal segments of abdomen red; legs black and yellow; abdomen of female without yellow maculae .....*abdominalis*

Petiole only of abdomen red; remaining segments black with yellow maculae laterally; legs red and yellow .....*rufinodus*

Mellinus abdominalis Cresson.

1881. *Mellinus abdominalis* Cresson, *Trans. Amer. Ent. Soc.*, IX, p. 39.

1894. *Mellinus abdominalis* Fox, *Ent. News*, V, p. 202.

Males 6, females 2: Imperial (1) and Glen (7); June 22 to August 22.

Mellinus rufinodus Cresson.

1865. *Mellinus rufinodus* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 475.
1894. *Mellinus rufinodus* Fox, *Ent. News*, V, p. 201.

Females 1: West Point, September, 1887.

SPHECINAE

KEY TO THE TRIBES

1. Second and third cubital cells each receiving a recurrent vein; propodeum with a U-shaped area on dorsal surface ..... *Chlorionini*
   Second cubital cell receiving both recurrent veins 2
2. Propodeum without a U-shaped dorsal area ..... *Sphecini*
   Propodeum with a U-shaped dorsal area ..... *Sceliphronini*

CHLORIONINI

Chlorion LePeletier

KEY TO THE SPECIES

1. Second cubital cell of fore wing higher than broad 2
   Second cubital cell of fore wings as broad or broader than high ... 8
2. Claws with one tooth ..... *cyaneum aerarium*
   Claws with two or more teeth 3
3. Claws with two teeth; clypeus with a median truncated lobe and a sinus on each side; abdomen black or at most only faintly brownish or ferruginous ..... *laeviventris*
   Claws with three to six teeth; clypeus without a median truncated lobe but often with a median emargination or notch 4
4. Abdomen black or dark brown ..... *atratum*
   Abdomen with some ferruginous or yellow color, at least ventrally: 5
5. Females 6
   Males 7
6. Size larger, abdomen more red; thorax with short dense pubescence; tubercles pubescent ..... *thomae*
   Size smaller, abdomen usually more black; thorax with pubescence longer and more sparse; tubercles usually not pubescent, *bifoveolatum*
7. Sixth abdominal tergite not broadly excavated ..... *thomae*
   Sixth abdominal tergite broadly excavated on its posterior margin, *bifoveolatum*
8. Stigmatal groove rudimentary or absent 9

Stigmatal groove present 12

9. Third cubital cell not broader on the radial nervure than the distance between the second transverse cubital and second recurrent nervures on the cubital nervure .....*lucae*

Third cubital cell broader on the radial nervure 10

10. Mandibles with two teeth; petiole black; propodeum with long white hairs above .....*aztecum cinereum*

Mandibles with three teeth 11

11. Legs black, abdomen black; pubescence of thorax griseous ....*harrisi*

Legs ferruginous, adbomen more or less so; pubescence of thorax golden .....*elegans*

12. Abdomen and legs more or less ferruginous; pubescence of thorax bright golden .....*ichneumoneum*

Entirely black, with black pubescence; wings black, violaceous, *pennsylvanicum*

Chlorion cyaneum aerarium Patton.

1879. *Chlorion aerarium* Patton, *Can. Ent.*, XI, p. 133.

1906. *Chlorion (Chlorion) cyaneum aerarium* Fernald, *Proc. U. S. Nat. Mus.*, XXXI, p. 317.

1908. *Chlorion cyaneum* H. S. Smith, Univ. Nebr. Studies, VIII, p. 332.

Males 26, females 29: Omaha (23), Louisville (16), Lincoln (3), North Platte (2), Haigler (4), Halsey (3) and Mitchell (3); July 14 to September 8; visits flowers of *Chamaecrista fasciculata* and *Dicrophyllum marginatum*.

Chlorion laeviventris (Cresson).

1865. *Sphex laeviventris* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 463.

1906. *Chlorion (Palmodes) laeviventris* Fernald, *Proc. U. S. Nat. Mus.*, XXXI, p. 318.

Males 1, females 1: Halsey (2); July 29, 1912, and August 30, 1912 (J. T. Zimmer).

Chlorion atratum (LePeletier).

1845. *Sphex atrata* LePeletier, *Hist. Nat. Insectes, Hymen.*, III, p. 335.

1906. *Chlorion (Prionopyx) atratum* Fernald, *Proc. U. S. Nat. Mus.*, XXXI, p. 338.

Males 197, females 118: Rulo (2), South Sioux City (4), Omaha (23), Union (1), Ashland (1), Louisville (25), South Bend (6), Lincoln (86), Cedar Bluffs (9), Maskell (8), Con-

cord (8), West Point (10), Fairmont (24), Maxwell (3), Broken Bow (1), Holt county (3), Curtis (1), McCook (1), Lexington (1), Imperial (4), Mitchell (37), Chadron (1), Haigler (2), Dundy county (3), Harrison (2), Glen (17), Pine Ridge (2), Warbonnet Canyon (1) and Sioux county (1); June 17 to October 10; visits flowers of *Petalostemum purpureum, Asclepias incarnata, Asclepias verticillata, Solidago glaberrima, Asclepias tuberosa, Chamaecrista fasciculata, Petalostemum candidum, Amorpha canescens, Ceanothus americanus, Euphorbia emarginata, Cleome serrulata* and *Solidago rigida.*

Chlorion thomae (Fabricius).

1775. *Sphex thomae* Fabricius, *Ent. Syst.*, p. 346.
1906. *Chlorion* (*Prionony*x) *thomae* Fernald, *Proc. U. S. Nat. Mus.*, XXXI, p. 342.

Males 6, females 16: Lincoln (1), Imperial (1), Gering (1), Mitchell (14), Agate (1), Monroe Canyon (4) and Glen (1); June 24 to September 10; visits flowers of *Petalostemum violaceus* and *Melilotus alba.*

Chlorion bifoveolatum (Taschenberg).

1869. *Prionony*x *bifoveolata* Taschenberg, *Zeitschrift fur aes. Naturwissenschaft,* XXXIV, p. 408.
1906. *Chlorion* (*Prionony*x) *bifoveolatum* Fernald, *Proc. U. S. Nat. Mus.,* XXXI, p. 346.

Males 1, females 2: Mitchell (1), Monroe Canyon (1) and Sioux county (1); July 27 to August 6; visits flowers of *Melilotus alba.*

Chlorion aztecum cinereum (Fernald).

1903. *Isodontia macrocephala cinerea* Fernald, *Can. Ent.*, XXXV, p. 271.
1906. *Chlorion* (*Isodontia*) *aztecum cinereum* Fernald, *Proc. U. S. Nat. Mus.*, XXXI, p. 356.

Females 2: Omaha (2); August 5 and August 17 (L. T. Williams).

Chlorion harrisi Fernald.

1856. *Sphex apicalis* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 262.
1906. *Chlorion* (*Isodontia*) *harrisi* Fernald, *Proc. U. S. Nat. Mus.*, XXXI, p. 359.

Males 76, females 44: Omaha (40), Child's Point (3), Weeping Water (1), Louisville (5), South Bend (5), Lincoln (15), Neligh (1), Maskell (1), West Point (6), Broken Bow (2), Curtis (1), Bridgeport (2), Glen (16), Monroe Canyon (16), Bad Lands (3), Warbonnet Canyon (1), Sioux county (1) and Pine Ridge (1); June 10 to September 19; visits flowers of *Melilotus alba, Chamaecrista fasciculata, Solidago canadensis, Petalostemum* sp., *Symphoricarpos symphoricarpos, Euphorbia marginata* and *Helianthus* sp.

Chlorion elegans (F. Smith).

1856. *Sphex elegans* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 262.
1906. *Chlorion* (*Isodontia*) *elegans* Fernald, *Proc. U. S. Nat. Mus.*, XXXI, p. 361.

Males 1, females 7: Glen (4), Monroe Canyon (3), and Bad Lands (1); August 14 to August 24.

Chlorion lucae (Saussure).

1867. *Sphex lucae* Saussure, *Reise d. Novara, Hymen.*, p. 41.
1906. *Chlorion* (*Proterosphex*) *lucae* Fernald, *Proc. U. S. Nat. Mus.*, XXXI, p. 365.

Males 2, females 2: Curtis (1), Bridgeport (1), Haigler (1) and Glen (1); July 8 to August; visits flowers of *Melilotus alba.*

Chlorion ichneumoneum (Linnaeus).

1758. *Apis ichneumonea* Linnaeus, *Syst. Nat.*, 12th ed., I, p. 578.
1906. *Chlorion* (*Proterosphex*) *ichneumoneum* Fernald, *Proc. U. S. Nat. Mus.*, XXXI, p. 399.

Males 73, females 67: Omaha (12), Child's Point (1), Union (3), Humboldt (1), Louisville (21), Lincoln (23), Fairmont (1), West Point (2), Culbertson (1), Imperial (1), Haigler (1), Dundy county (1), Carns (2), Halsey (1), Mitchell (19), Harrison (1), Glen (17), Monroe Canyon (13), Warbonnet Canyon (7) and Bad Lands (6); June 21 to September 12; visits flowers of *Asclepias syriaca, Symphoricarpos symphoricarpos, Silphium integrifolium, Asclepias incarnata, Asclepias verticillata, Solidago glaberrima, Mentha canadensis, Euphorbia* sp., *Melilotus alba, Petalostemum candidum* and *Cleome serrulata.*

Chlorion pennsylvanicum (Linnaeus).

1763. *Sphex pennsylvanica* Linnaeus, *Syst. Nat.*, 12th ed., I, p. 941.
1906. *Chlorion* (*Protorosphex*) *pennsylvanicum* Fernald, *Proc. U. S. Nat. Mus.*, XXXI, p. 405.

Males 29, females 15: Omaha (6), Union (1), Louisville (15), Lincoln (19), West Point (1) and Glen (2); June 21 to September 10; visits flowers of *Melilotus alba, Asclepias syriaca, Petalostemum* sp., *Symphoricarpos symphoricarpos, Solidago glaberrima, Chamaecrista fasciculata* and *Euphorbia* sp.

SPHECINI

KEY TO THE GENERA

1. Front wings with two cubital cells; petiole long, two-jointed, as in *Sphex*; submedian cell as long as the median ..... *Coloptera*
   Front wings with three cubital cells; submedian cell a little shorter than the median 2
2. Petiole of the abdomen very long, two-jointed, the second segment being elongate and slender, forming with the first a long petiole, *Sphex*
   Petiole of the abdomen not especially long, one-jointed, the second segment bell-shaped; clypeus in the female with a more or less distinct median emargination ..... *Psammophila*

Coloptera LePeletier

Coloptera wrighti Cresson.

1868. *Coloptera wrightii* Cresson, *Trans. Amer. Ent. Soc.*, I, p. 378.
1903. *Coloptera wrightii* Melander, *Psyche*, X, p. 162.

Females 2: Bridgeport, July 10, 1912 (L. M. Gates); Pine Bluffs, August 27, 1893.

Sphex Linnaeus

KEY TO THE SPECIES

1. Pronotum or mesonotum or both, more or less transversely striated or ridged 2
   Mesonotum either smooth or punctured, but not with complete transverse striae 5
2. Thorax and legs entirely black 3
   Thorax and legs in part red 4
3. Size large, 22–30 mm.; pleura with pubescent stripes ..... *procerus*
   Size small, 14–16 mm.; pleura entirely silvery pubescent ..... *politus*

4. Head black; striae of propodeum becoming rugose laterally ..*cressoni*
   Head ferruginous; striae of propodeum more complete laterally, *ferruginosus*
5. Legs at least in part red 6
   Legs black 8
6. Propodeum sharply, densely, and obliquely striated; face and clypeus silvery .....*alberti*
   Head and clypeus black; propodeum at least centrally with transverse striae 7
7. First joint of petiole black, i. e., with more black than second joint; head and thorax with silvery pubescence .....*breviceps*
   First joint of petiole with more red than second joint; species of 16–25 mm. .....*pruinosus*
8. Abdomen entirely black, or with a very little red; pleura with silvery spots; clypeus of male produced; sides of propodeum finely rugulose .....*abbreviatus*
   Abdomen in part red 9
9. Pleura uniform dull black in color, without silvery pubescent markings 10
   Pleura with markings of silvery pubescence; wings hyaline or nearly so 11
10. Wings black, violaceous; second segment of petiole usually black above .....*nigricans*
    Wings yellowish, usually darker apically; second segment of petiole usually red above .....*extremitatus*
11. Thorax with dense silvery pubescence throughout .....*argentatus*
    Thorax with more or less sparse silvery-cinereous pubescence..... 12
12. Propodeum dorsally with well-marked oblique striae, generally connected by a raised median line .....*vulgaris*
    Propodeum without a raised median line 13
13. Mesonotum strigose near the sides .....*urnarius*
    Mesonotum simply punctate throughout 14
14. Scutellum sparsely punctate .....*strenuus*
    Scutellum channelled longitudinally; thorax very sparsely punctate, *junceus*

Sphex abbreviatus (Fabricius).

1804. *Pelopoeus abbreviatus* Fabricius, *Syst. Piez.*, p. 204.
1856. *Ammophila moneta* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 219.
1903. *Ammophila abbreviata* Melander, *Psyche*, X, p. 160.

Males 35, females 13: Child's Point (3), Omaha (40), Louisville (1) and Lincoln (4); July 10 to September 20; visits flowers of *Melilotus alba, Chamaecrista fasciculata* and *Symphoricarpos symphoricarpos.*

Sphex urnarius (Dahlbom).

1843. *Ammophila urnaria* (Klug) Dahlbom, *Hym. Eur.*, I, p. 14.
1903. *Ammophila urnaria* Melander, *Psyche*, X, p. 161.
1908. *Sphex vulgaris* H. S. Smith, Univ. Nebr. Studies, VIII, p. 330 (in part).

Males 88, females 41: Rulo (3), Omaha (39), Child's Point (1), Louisville (17), Meadow (1), South Bend (15), Ashland (1), Roca (1), Lincoln (17), Cedar Bluffs (3), West Point (5), South Sioux City (2), Maskell (2), Fairmont (2), Oxford (1), Glen (1), Monroe Canyon (3), Warbonnet Canyon (2) and Sioux county (7); May 22 to October 11; visits flowers of *Solidago canadensis, Symphoricarpos symphoricarpos, Solidago glaberrima, Solidago* sp., *Asclepias incarnata, Vernonia fasciculata, Chamaecrista fasciculata, Aster* sp. and *Amorpha canescens.*

Sphex nigricans (Dahlbom).

1843. *Ammophila nigricans* Dahlbom, *Hym. Eur.*, I, p. 14
1903. *Ammophila nigricans* Melander, *Psyche*, X, p. 161.

Males 73, females 44: Omaha (36), Child's Point (1), Louisville (17), Meadow (7), Weeping Water (1), South Bend (19), Ashland (5), Lincoln (20), Cedar Bluffs (3), West Point (6), Maskell (3), Concord (2) and Curtis (1); June 13 to September 14; visits flowers of *Melilotus alba, Chamaecrista fasciculata, Petalostemum purpureum, Solidago glaberrima, Symphoricarpos symphoricarpos, Amorpha canescens* and *Ceanothus americanus.*

Sphex procerus (Dahlbom).

1843. *Ammophila procera* Dahlbom, *Hym. Eur.*, I, p. 15.
1856. *Ammophila gryphus* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 222.
1903. *Ammophila procera* Melander, *Psyche*, X, p. 159.

Males 65, females 46: Omaha (7), Weeping Water (1), Meadow (1), Ashland (1), South Bend (17), Louisville (25), Lincoln (10), Cedar Bluffs (7), West Point (2), Maskell (3), Fairmont (2), Halsey (1), Mitchell (5), Glen (6), Monroe Canyon (6) and Sioux county (3); June 20 to October 11; visits flowers of *Solidago rigida, Amorpha canescens, Asclepias tuberosa, Melilotus alba, Petalostemum purpureum, Vernonia fasciculata, Symphoricarpos symphoricarpos, Solidago glaberrima, Chamaecrista fasciculata* and *Aster* sp.

Sphex alberti (Haldeman).

1852. *Ammophila alberti* Haldeman, Stansbury: *Explor. Salt Lake*. p. 368.
1879. *Ammophila alberti* Patton, *Bull. U. S. Geol. Surv.*, V, p. 353.
1903. *Ammophila aberti* Melander, *Psyche*, X, p. 160.

Females 1: Glen, August 17, 1906 (H. S. Smith), on *Solidago* sp.

Sphex breviceps (F. Smith).

1856. *Ammophila breviceps* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 221.
1865. *Ammophila varipes* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 457.
1903. *Ammophila breviceps* Melander, *Psyche*, X, p. 160.

Males 35, females 40: Omaha (6), Ashland (1), Fairmont (2), Red Cloud (1), Curtis (2), Imperial (2), Oxford (1), Haigler (1), Dundy county (1), Bridgeport (1), Kimball (11), Mitchell (28), Harrison (4), Glen (8), Warbonnet Canyon (1) and Sioux county (5); June 18 to September 11; visits flowers of *Melilotus alba, Helianthus petiolaris, Cleome serrulata, Solidago* sp. and *Petalostemum* sp.

Sphex ferruginosus (Cresson).

1865. *Ammophila ferruginosa* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 455.
1903. *Ammophila ferruginosa* Melander, *Psyche*, X, p. 160.

Females 28: Imperial (1), Haigler (1), Halsey (1), Mitchell (19), Pine Ridge (4), Monroe Canyon (1) and Glen (1); June 9 to September 12.

It is quite probable that *cressoni* is the male of this species. In each case the opposite sex is unknown and this series of twenty-eight females was collected in the same general locality and shows practically the same seasonal distribution as the five males of *cressoni*. In structure the two species seem to show no differences except in the usual secondary sexual characters which are found in this genus. From these circumstances it would seem that these two are but a single species and probably further collecting will prove this to be the case.

Sphex cressoni H. S. Smith.

1865. *Ammophila collaris* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 456.
1903. *Ammophila collaris* Melander, *Psyche*, X, p. 159.
1908. *Sphex cressoni* H. S. Smith, Univ. Nebr. Studies, VIII, p. 329.

Males 5: Mitchell (1), Glen (2) and Harrison (2); July 12 to September 5.

Sphex pruinosus (Cresson).

1865. *Ammophila pruinosa* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 455.
1903. *Ammophila pruinosa* Melander, *Psyche*, X, p. 160.

Males 5, females 3: Mitchell (5), Harrison (1) and Glen (2); July 7 to September 4.

Sphex extremitatus (Cresson).

1865. *Ammophila extremitata* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 457.
1903. *Ammophila extremitata* Melander, *Psyche*, X, p. 161.

Males 46, females 86: Rulo (1), Omaha (11), Louisville (2), Meadow (3), South Bend (3), Lincoln (95), Cedar Bluffs (2), West Point (2), Oxford (1), Curtis (3) and North Platte (1); May to October; visits flowers of *Solidago glaberrima, Chamaecrista fasciculata, Achillea millefolium, Petalostemum purpureum, Petalostemum violaceus, Medicago sativa, Cleome serrulata* and *Melilotus alba.*

Sphex politus (Cresson).

1865. *Ammophila polita* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 458.
1903. *Ammophila polita* Melander, *Psyche*, X, p. 160.

Females 1: Sioux county, July.

Sphex vulgaris (Cresson).

1865. *Ammophila vulgaris* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 458.
1903. *Ammophila vulgaris* Melander, *Psyche*, X, p. 160.

Males 142, females 78: Omaha (31), South Sioux City (4), Louisville (2), South Bend (2), Lincoln (55), Cedar Bluffs (5), Concord (1), Coburn (1), Fairmont (7), West Point (15), Neligh (1), Holt county (1), Broken Bow (1), Lexington (1), McCook (1), Haigler (2), North Platte (3), Ogallala (1), Halsey (2), Bridgeport (1), Kimball (1), Mitchell (5), Gordon Creek (1), Harrison (3), Pine Ridge (1), Glen (21), Monroe

Canyon (18), Bad Lands (1), Warbonnet Canyon (4), and Sioux county (28); May 22 to October 11; visits flowers of *Solidago glaberrima, Amorpha canescens, Medicago sativa, Cleome* sp. and *Melilotus alba.*

Sphex argentatus (Hart).

1907. *Ammophila argentata* Hart, *Bull. Ill. Lab.,* VII, p. 267.

Males 4, females 7: West Point (1), Holt county (1), Neligh (2), Halsey (6) and Glen (1); June 9 to August 25.

Sphex strenuus (Cresson).

1865. *Ammophila strenua* Cresson, *Proc. Ent. Soc. Phil.,* IV, p. 459.
1903. *Ammophila strenua* Melander, *Psyche,* X, p. 161.

Males 3, females 6: Glen (3), Monroe Canyon (5) and Sioux county (1); August 3 to August 20; visits flowers of *Monarda* sp.

Sphex junceus (Cresson).

1865. *Ammophila juncea* Cresson, *Proc. Ent. Soc. Phil.,* IV, p. 460.
1903. *Ammophila juncea* Melander, *Psyche,* X, p. 161.

Males 5, females 5: Mitchell (1), Glen (1), Monroe Canyon (7) and Bad Lands (1); July 14 to August 19.

Psammophila Dahlbom

KEY TO THE SPECIES

1. Body wholy black; pubescence in part white, face silvery (male) or pubescence black (female) ..... *luctuosa*
   Abdomen more or less ferruginous 2
2. Petiole of abdomen short, not extending beyond hind trochanters, *grossa*
   Petiole of abdomen long, extending much beyond hind trochanters.. 3
3. Large species, very robust, 22–26 mm.; abdomen of female entirely ferruginous ..... *valida*
   Smaller species, 14–18 mm.; abdomen of female in part black, *violaceipennis*

Psammophila luctuosa (F. Smith).

1856. *Ammophila luctuosa* F. Smith, *Cat. Hym. Brit. Mus.,* IV, p. 224.
1903. *Psammophila luctuosa* Melander, *Psyche,* X, p. 158.

Males 43, females 80: Ashland (1), Brady Island (5), Mitchell (23), Halsey (11), Crawford (2), Harrison (8), Glen (1), Mon-

roe Canyon (7) and Sioux county (12); June 10 to August 15; visits flowers of *Petalostemum* sp.

Psammophila valida (Cresson).

1865. *Ammophila valida* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 461.
1903. *Psammophila valida* Melander, *Psyche*, X, p. 158.

Males 4, females 8: Mitchell (1), Monroe Canyon (8) and Warbonnet Canyon (1); July 10 to August 20.

Psammophila grossa (Cresson).

1872. *Ammophila grossa* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 209.
1903. *Psammophila grossa* Melander, *Psyche*, X, p. 158.

Females 34: South Sioux City (1), Lincoln (2), West Point (2), Holt county (1), Halsey (4), Mitchell (9), Glen (1), Monroe Canyon (5), Bad Lands (1) and Sioux county (2); June 2 to September 12; visits flowers of *Melilotus alba*.

Psammophila violaceipennis (LePeletier).

1845. *Ammophila violaceipennis* LePeletier, *Hist. Nat. Ins., Hym.*, III, p. 370.
1903. *Psammophila violaceipennis* Melander, *Psyche*, X, p. 159.

Males 111, females 9: Lincoln (4), West Point (1), Mitchell (35), Bridgeport (1), Halsey (2), Crawford (1), Pine Ridge (1), Glen (1), Bad Lands (1), Monroe Canyon (19), Sowbelly Canyon (2), Warbonnet Canyon (1) and Sioux county (16); June 10 to August 31; visits flowers of *Melilotus alba* and *Monarda* sp.

SCELIPHRONINI

KEY TO THE GENERA

Transverse median nervure in front wings interstitial with the basal nervure; species metallic blue or violaceous; clypeus anteriorly three-dentate; petiole of abdomen not or scarcely longer than the propodeum, *Chalybion*

Transverse median nervure in front wings not interstitial with the basal nervure, but uniting with the median nervure a little before the origin of the basal nervure; species black and yellow, not metallic; clypeus flat, at apex bidentate; petiole of abdomen about twice as long as propodeum, *Sceliphron*

Chalybion Dahlbom

Chalybion coeruleum (Linnaeus).

1758. *Sphex coerulea* Linnaeus, *Syst. Nat.*, 10th ed., p. 571.

Males 42, females 40: Omaha (26), Louisville (12), South Bend (5), Roca (1), Lincoln (12), Red Cloud (1), Maskell (3), West Point (10), Badger (1), Carns (1), Brady Island (1), Haigler (1), Harrison (1), Glen (1), Bad Lands (1) and Sioux county (1); June 13 to September; visits flowers of *Chamaecrista fasciculata, Euphorbia marginata, Monarda* sp. and *Cleome* sp.

Sceliphron Klug.

Sceliphron coementarium (Drury).

1770. *Sphex coementaria* Drury, *Ill. Nat. Hist.*, I, p. 105.

Males 66, females 68: Rulo (1), Child's Point (1), Omaha (38), Louisville (14), Meadow (2), South Bend (2), Ashland (1), Lincoln (42), Fairmont (2), Concord (1), West Point (13), Hitchcock county (1), Haigler (2), Halsey (1), Bridgeport (1), Monroe Canyon (6), Bad Lands (1) and Sioux county (1); June 12 to September 14; visits flowers of *Melilotus alba, Chamaecrista fasciculata, Solidago* sp., *Achillea millefolium, Euphorbia marginata* and *Helianthus* sp.

LARRINAE

KEY TO THE TRIBES

Posterior ocelli perfect; inner margins of eyes subparallel; pronotum trilobed dorsally ..... *Lyrodini*

Posterior ocelli imperfect, flattened; inner margins of eyes strongly converging above; pronotum simple ..... *Larrini*

LYRODINI

Lyroda Say

KEY TO THE SPECIES

Size large, 14–15 mm.; wings dark smoky; form stout, opaque black, abdomen without silvery pile; anterior margin of clypeus of female not at all dentate laterally ..... *triloba*

Size smaller, 7–13 mm.; wings hyaline, tips dusky; more slender than the above, and with silvery pile on the abdomen; anterior margin of clypeus of female armed with three distinct teeth laterally ..... *subita*

Lyroda triloba Say.

1837. *Lyroda triloba* Say, *Bost. Journ. Nat. Hist.*, I, p. 372.
1893. *Lyroda triloba* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 533.
1913. *Lyroda triloba* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 174.

Females 1: Lincoln, August (W. D. Pierce), on *Euphorbia marginata.*

Lyroda subita Say.

1837. *Lyroda subita* Say, *Bost. Journ. Nat. Hist.*, I, p. 372.
1893. *Lyroda subita* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 533.
1913. *Lyroda subita* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 174.

Males 19, females 17: Union (1), Omaha (22), Louisville (1), Ashland (1), Lincoln (2), Fairmont (1), West Point (1), Haigler (1), Mitchell (5) and Monroe Canyon (1); June 20 to August 19; visits flowers of *Chamaecrista fasciculata, Melilotus alba* and *Physalis virginiana.*

LARRINI

KEY TO THE GENERA

1. Face along the inner eye-margin without a swelling or fold 2
   Face with a more or less developed longitudinal swelling or fold along the inner eye-margin 3
2. Comb of anterior tarsi of female composed of very large flexible spines or bristles; pygidial area naked; hind ocelli oval; fore femora of the male always emarginate beneath the base .....*Tachysphex*
   Comb of anterior tarsi of female composed of stiff rather short thorns; pygidial area entirely covered with pubescence; hind ocelli linear, hooked at upper end; fore femora of male either emarginate or simple beneath near the base .....*Tachytes*
3. Mandibles indistinctly dentate; pygidial area in female bare; pronotum hardly depressed beneath the level of the mesonotum; posterior margin of the pronotum nearly straight (transversely) .....*Larra*
   Mandibles more or less bidentate within; pygidial area of female more or less pubescent 4
4. Pronotum not drawn under the mesonotum; propodeum shorter than the mesonotum; anterior femora of male emarginate near the base; pygidial area bare towards the base, but with short stiff hairs at the apex .....*Larropsis*
   Pronotum drawn under the mesonotum, especially at the sides; propodeum longer than the mesonotum; anterior femora of the male not emarginate near the base; pygidium pubescent in both sexes, *Notogonidea*

Notogonidea Rohwer

Notogonidea argentata (Beauvais).

1805. *Larra argentata* Beauvais, *Ins. Afr. et Amer.*, p. 119, taf. III, f. 9.
1893. *Notogonia argentata* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 485.
1913. *Notogonia argentata* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 141.

Males 8, females 8: Omaha (4), Weeping Water (1), Ashland (1), Lincoln (8), Fairmont (1) and West Point (1); June 25 to October; visits flowers of *Chamaecrista fasciculata.*

Larropsis Patton

KEY TO THE SPECIES

Females

1. Interocular space at the vertex less than or about equal to the length of antennal joints two and three united 2
   Interocular space at the vertex distinctly wider than the length of antennal joints two and three united 5
2. Disc of propodeum with delicate striae which diverge from beyond the base; wings nearly clear .....*distincta*
   Disc of propodeum strongly granulate or rugose, with indistinct divergent striae 3
3. Abdomen black .....*picina*
   Abdomen orange or reddish 4
4. Large species, 11–15 mm.; tarsi testaceous .....*aurantia*
   Small species, 7–8 mm.; tarsi piceous .....*rubens*
5. Antennae shorter and stouter, shorter than the head and thorax; fourth antennal joint about two times as long as its middle diameter, *vegeta*
   Antennae long and setaceous, longer than head and thorax (except in *divisa,* where they are about equal to the head and thorax); fourth antennal joint three to four times as long as its middle diameter.. 6
6. Pygidium well polished, sparsely large punctate, almost naked; form slender; abdomen black and red; wings light smoky .....*conferta*
   Pygidium rough, rather densely punctate, pubescent; form stouter, with dark fuscous wings 7
7. Antennae longer than the head and thorax; second abdominal segment reddish; tarsi black or nearly so .....*rugosa*
   Antennae about as long as head and thorax; abdomen varying from red and black to red; tarsi testaceous .....*divisa*

Males

1. Interocular space at vertex not wider than length of antennal joints two and three 2
   Interocular space at vertex decidedly wider than the length of antennal joints two and three 4
2. Disc of propodeum with delicate striae, which diverge from beyond the base; third antennal joint one-third shorter than the fourth, *distincta*
   Disc of propodeum finely granulate to rugose; antennal joints three and four subequal 3
3. Abdomen red and black ..... *aurantia*
   Abdomen entirely black ..... *picina*
4. Wings clear or nearly so 5
   Wings fuscous 9
5. Abdomen red and black, or entirely red 6
   Abdomen entirely black 7
6. Disc of propodeum longitudinally striated; length 6–7 mm. . *sericifrons*
   Disc of propodeum finely, transversely striated; length 8–11 mm., *conferta*
7. First joint of flagellum but half the length of the second ..... *yatesi*
   First joint of flagellum but little shorter than the second 8
8. Disc of propodeum with a longitudinal sulcus only on apical half, and with some rather indistinct raised lines diverging from the base to the sides nearly to its middle length; puncturation of mesonotum rather coarse and so close as to give it an opaque appearance; length 6 mm. ..... *minor*
   Disc of propodeum with a longitudinal sulcus usually extending its entire ength, the diverging lines wanting or very short; puncturation of mesonotum rather fine, the punctures well separated; mesonotum, therefore, rather shining and smooth; length 8–11 mm. ..... *bruneri*
9. Antennae as long as head and thorax, or nearly so; second abdominal segment red ..... *rugosa*
   Antennae distinctly shorter than the head and thorax together 10
10. Abdomen red and black ..... *divisa*
    Abdomen entirely black ..... *vegeta*

Larropsis distincta (F. Smith).

1856. *Larrada distincta* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 292.
1893. *Ancistroma distincta* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 491.
1913. *Larropsis distincta* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 144.

Males 74, females 56: Omaha (54), Lincoln (44), West Point (7), Broken Bow (3), Glen (5) and Monroe Canyon (6);

August 3 to September 19; visits flowers of *Chamaecrista* sp., *Aster multiflorus* and *Solidago canadensis*.

Larropsis aurantia (Fox).

1891. *Larra aurantia* Fox, *Ent. News*, II, p. 194.
1893. *Ancistroma aurantia* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 490.
1913. *Larropsis aurantia* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 144.

Males 4, females 7: Omaha (4), Lincoln (1), West Point (1), Mitchell (1), Harrison (2) and Monroe Canyon (2); August 1 to September 10; visits flowers of *Chamaecrista* sp.

Larropsis rubens Mickel.

1918. *Larropsis rubens* Mickel, Univ. Nebr. Studies, XVII, p. 329.

Females 1: Mitchell, September 6, 1916 (R. W. Dawson).

Larropsis picina Mickel.

1916. *Larropsis picina* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 418.

Males 4, females 1: Harrison (5), August 9, 1908 (C. H. Gable).

Larropsis sericifrons (H. S. Smith).

1906. *Ancistroma sericifrons* H. S. Smith, *Ent. News*, XVII, p. 247.
1908. *Ancistroma sericifrons* H. S. Smith, Univ. Nebr. Studies, VIII, p. 376.

Males 6: Glen (6); August 20 and 22.

Larropsis conferta (Fox).

1893. *Ancistroma conferta* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 494.
1913. *Larropsis conferta* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 145.

Males 32, females 15: Omaha (1), South Sioux City (1), West Point (2), Halsey (3), Mitchell (1), Glen (31), Harrison (4), Monroe Canyon (2) and Pine Ridge (1); June to August 22; visits flowers of *Chamaecrista fasciculata, Melilotus alba, Cleome serrulata* and *Gutierrezia sarothrae*.

Larropsis bruneri (H. S. Smith).

1906. *Ancistroma bruneri* H. S. Smith, *Ent. News*, XVII, p. 248.
1908. *Ancistroma bruneri* H. S. Smith, Univ. Nebr. Studies, VIII, p. 376.
1913. *Larropsis bruneri* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 145.

Males 13: Omaha (4), South Bend (1), West Point (5), Haigler (1), Ogallala (1) and Glen (1); June 24 to August 21; visits flowers of *Chamaecrista fasciculata* and *Asclepias tuberosa*.

Larropsis minor Williams.

1913. *Larropsis minor* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 146.

Males 1: Glen, August 22, 1906 (L. Bruner).

Larropsis yatesi Mickel.

1918. *Larropsis yatesi* Mickel, Univ. Nebr. Studies, XVII, p. 329.

Males 1: Mitchell, August 2, 1917 (E. J. Yates), on *Melilotus alba*.

Larropsis vegeta (Fox).

1893. *Ancistroma vegeta* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 497.

Males 10, females 11: Bridgeport (1), Mitchell (9), Glen (10) and Monroe Canyon (1); June 15 to August 21.

Larropsis divisa (Patton).

1879. *Larra divisa* Patton, *Bull. U. S. Geol. Surv.*, V, p. 368.
1893. *Ancistroma divisa* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 495.
1913. *Larropsis divisa* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 146.

Females 2: Halsey, August 7, 1912 (J. T. Zimmer), and Harrison, August 4, 1908 (R. W. Dawson).

Larropsis rugosa (Fox).

1893. *Ancistroma rugosa* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 496.
1908. *Ancistroma divisum* H. S. Smith, Univ. Nebr. Studies, VIII, p. 376.
1913. *Larropsis rugosa* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 147.

Males 2, females 2: Glen, August 20, 1906, and Monroe Canyon, August 6, 1908.

Larra Fabricius

Larra analis Fabricius.

1804. *Larra analis* Fabricius, *Syst. Piez.*, p. 220.
1893. *Larra analis* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 481.
1913. *Larra analis* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 140.

Females 2: Lincoln, September 10, 1908 (R. W. Dawson), and Haigler, August 20, 1909 (C. H. Gable).

Tachytes Panzer

KEY TO THE SPECIES

Females

1. Clypeus with the anterior margin in the middle, produced into a large quadrate tooth or lobe, and with several small teeth laterally ... 2
   Clypeus with the anterior margin not or scarcely produced into a lobe, at the most thickened in the middle 4
2. Propodeum strongly sulcate medially, the sulcus wide; pygidium with a coppery luster .....*mandibularis*
   Propodeum not strongly sulcate medially 3
3. Third joint of antennae about one quarter longer than the fourth; thorax sparsely clothed with grayish pubescence; propodeum finely granulated .....*harpax*
   Third joint of antennae but little longer than the fourth; front and thorax with silvery pubescence .....*calcaratus*
4. Clypeus armed with a large prong on either side.....*mergus*
   Clypeus without a lateral prong 5
5. Abdomen in part red 6
   Abdomen entirely black 8
6. Third and fourth joints of antennae equal in length; clypeus rather deeply emarginate medially; disc of propodeum granular..*austerus*
   Third joint of antennae longer than the fourth 7
7. Pygidium not at all constricted near the apex, bronzy; species with considerable erect pile on the head and thorax .....*fulviventris*
   Pygidium a little narrowed before the apex; pubescence rather sparse, *rufofasciatus*
8. Clypeus without teeth, its anterior margin subtruncate, with a slight production medially; abdomen with brassy or silvery fasciae; wings light fuscous .....*obductus*
   Clypeus rounded out, armed laterally with more or less distinct teeth. 9
9. Metatibiae with at least the basal half of the outer posterior row of spines short, blunt, and thorn-like, the spines much stouter than those on the first joint of the hind tarsi; mandibles very narrowly notched exteriorly .....*obscurus*
   Metatibiae with the outer row of spines not short as in the above, usually well pointed and differing but little from those of the first joint of the hind tarsi 10
10. Abdomen not silvery fasciate; small species, 6–8 mm.....*maestus*
    Abdomen silvery fasciate; large species, 14–22 mm..... 11
11. Abdomen dorsally with three silvery bands; front golden 12
    Abdomen dorsally with four silvery bands; front silvery 13
12. Posterior femora ferruginous; wings yellowish, darker at the apex, *distinctus*

Posterior femora largely black; wings subhyaline, not darker at the apex ..... *crassus*

13. Longer spur of hind tibiae longer than the basitarsus; apex of femora, tibiae and tarsi, yellowish ferruginous ..... *columbiae*

Longer spur of hind tibiae about equal in length to the basitarsus; legs black, tibiae and tarsi with silvery pile, the tarsi ferruginous apically ..... *pepticus*

Males

1. Fore coxae simple; fore femora near the base entire 2

Fore coxae with an elongate posterior process; fore femora near the base emarginate 8

2. Joints 9–11 of antennae visibly broadened on one side, thereby contrasting with the two apical joints; abdomen partly red or entirely black ..... *fulviventris*

Joints 9–11 of antennae normal, not broadened 3

3. Flagellum with the basal joints not or very slightly rounded out beneath 4

Flagellum with the basal joints distinctly rounded out beneath 5

4. Apex of femora, tibiae and tarsi, yellow ferruginous; hind tarsi very feebly spinose ..... *crassus*

Legs, except apex of tarsi, black; hind tarsi rather strongly spinose, *pepticus*

5. Last dorsal abdominal segment not tufted with dark hair 6

Last dorsal abdominal segment tufted laterally with dark hair 7

6. Hind tarsi not at all spinose; lateral teeth of clypeus large and distinct ..... *mandibularis*

Hind tarsi distinctly spinose; longer spur of hind tibiae longer than the basitarsus ..... *calcaratus*

7. Emargination of last ventral plate very narrow; first joint of flagellum in length about equal to the second; head and thorax with golden pubescence ..... *harpax*

Emargination of last ventral plate broad and round; first joint of flagellum shorter than the second; head and thorax with silvery pubescence ..... *columbiae*

8. Pygidium with pile all appressed; usually larger species 9

Pygidium with pile largely suberect; small black species 10

9. Wings yellow, their apical portion dark, abdomen black, larger species, *distinctus*

Wings pale yellowish hyaline, not dark apically; abdominal segments 1 and 2 usually fulvous, rather smaller species ..... *rufofasciatus*

10. Interocular space at vertex much less than the length of antennal joints 2–4 united 11

Interocular space at vertex about equal to the length of antennal joints 2–4 united 13

11. Tibiae and tarsi reddish; front and thorax of body with rather long whitish hair .....*minor*

Legs entirely black, except apical portion of tarsi may be reddish.. 12

12. Silvery fasciae of abdomen distinct; body well covered with pile; thorax scarcely shining, with larger, closer punctures.....*obscurus*

Silvery fasciae of abdomen not very well defined; insect sparsely pilose; thorax shining, the punctures there finer and more separate, *intermedius*

13. Longer spur of hind tibiae shorter than the basitarsus; tarsi entirely black .....*parvus*

Longer spur of hind tibiae longer than the basitarsus; tarsi with the apical half reddish .....*minutus*

Tachytes mandibularis Patton.

1880. *Tachytes mandibularis* Patton, *Proc. Bost. Soc. Nat. Hist.*, XX, p. 394.
1893. *Tachytes mandibularis* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 501.
1913. *Tachytes mandibularis* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 152.

Males 32, females 25: Weeping Water (1), Louisville (4), Meadow (5), Ashland (1), Lincoln (8), Malcolm (2), Curtis (1), Halsey (1), Mitchell (21), Glen (9) and Bad Lands (4); July 16 to August 20; visits flowers of *Solidago glaberrima, Symphoricarpos symphoricarpos, Lactuca pulchella, Asclepias* sp., *Petalostemum violaceus, Melilotus alba* and *Cleome serrulata.*

Tachytes harpax Patton.

1880. *Tachytes harpax* Patton, *Proc. Bost. Soc. Nat. Hist.*, XX, p. 394.
1893. *Tachytes harpax* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 501.

Males 9, females 3: Omaha (6), Lincoln (1), West Point (2) and South Sioux City (3); July 8 to August 20; visits flowers of *Solidago rupestris* and *Chamaecrista fasciculata.*

Tachytes calcaratus Fox.

1892. *Tachytes calcaratus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 239.
1893. *Tachytes calcaratus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 501.

Males 3: Omaha (1), Louisville (1) and Lincoln (1); July 30 to September 4; visits flowers of *Solidago glaberrima.*

Tachytes columbiae Fox.

1892. *Tachytes columbiae* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 241.
1893. *Tachytes columbiae* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 502.

Males 1, females 1: South Bend (2); July 15, 1914 (E. M. Partridge), on *Melilotus alba.*

Tachytes crassus Patton.

1880. *Tachytes crassus* Patton, *Proc. Bost. Soc. Nat. Hist.*, XX, p. 393.
1893. *Tachytes crassus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 502.

Males 7, females 1: Louisville (1), Meadow (3), Lincoln (3) and West Point (1); July 8 to July 31; visits flowers of *Asclepias* sp. and *Mentha canadensis.*

Tachytes pepticus (Say).

1837. *Lyrops peptica* Say, *Bost. Journ. Nat. Hist.*, I, p. 371.
1892. *Tachytes pepticus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 242.
1913. *Tachytes pepticus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 156.

Males 152, females 22: Omaha (20), Louisville (6), South Bend (8), Lincoln (21), Malcolm (1), West Point (1), Carns (4), Curtis (1), Culbertson (1), Haigler (1), Dundy county (4), Halsey (8), Bridgeport (2), Mitchell (36), Gordon (1), Crawford (1), Glen (20), Warbonnet Canyon (4), Monroe Canyon (28) and Bad Lands (1); June to September 13; visits flowers of *Melilotus alba, Asclepias syriaca, Chamaecrista fasciculata, Solidago canadensis, Asclepias incarnata, Solidago glaberrima, Asclepias verticillata, Ceanothus americanus, Solidago rupestris, Euphorbia marginata, Verbena* sp., *Ratibida* sp., *Sagittaria latifolia, Cleome serrulata, Monarda* sp. and *Petalostemum* sp.

Tachytes fulviventris Cresson.

1865. *Tachytes fulviventris* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 466.
1892. *Tachytes fulviventris* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 243.
1913. *Tachytes fulviventris* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 155.

Males 8, females 38: Omaha (2), South Bend (1), Ashland (4), Carns (1), Curtis (1), Culbertson (1), Haigler (3), Ogallala (1), Halsey (1), Mitchell (18), Gordon (2), Glen (8), Harrison (1), Pine Ridge (1) and Monroe Canyon (3); June 24 to August 31; visits flowers of *Chamaecrista fasciculata, Ratibida*

columnaris, Petalostemum violaceus, Melilotus alba, Solidago sp. and *Cleome serrulata.*

Tachytes distinctus F. Smith.

1856. *Tachytes distinctus* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 307.
1892. *Tachytes distinctus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 246.
1913. *Tachytes distinctus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 157.

Males 31, females 27: Omaha (31), Louisville (3), South Bend (1), Meadow (3), Lincoln (13), Red Cloud (1), Curtis (2) and Haigler (1); July 10 to September 12; visits flowers of *Melilotus alba, Chamaecrista fasciculata, Euphorbia* sp., *Helianthus* sp. and *Dicrophyllum marginatum.*

Tachytes rufofasciatus Cresson.

1872. *Tachytes rufo-fasciata* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 217.
1892. *Tachytes rufofasciatus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 247.
1913. *Tachytes rufofasciatus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 155.

Males 1, females 2: Omaha (2) and Haigler (1); July 7 to August 12; visits flowers of *Chamaecrista fasciculata.*

Tachytes austerus Mickel.

1916. *Tachytes austerus* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 417.

Females 1: Omaha, August 5, 1914 (L. T. Williams).

Tachytes obscurus Cresson.

1872. *Tachytes obscurus* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 217.
1893. *Tachytes obscurus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 504.
1913. *Tachytes obscurus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 154.

Males 7, females 2: Omaha (4), Louisville (1), Lincoln (1), Fairmont (1), Mitchell (1) and Bad Lands (1); July 11 to September 8; visits flowers of *Chamaecrista fasciculata.*

Tachytes intermedius (Viereck).

1906. *Tachysphex intermedius* Viereck, *Trans. Amer. Ent. Soc.*, XXXII, p. 211.
1913. *Tachytes intermedius* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 154.

Males 5: Omaha (4) and Mitchell (1); July 16 to August 14; visits flowers of *Chamaecrista fasciculata* and *Melilotus alba.*

Tachytes parvus Fox.

1892. *Tachytes parvus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 249.
1893. *Tachytes parvus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 504.

Males 1: Omaha, August 13, 1914 (L. T. Williams), on *Chamaecrista fasciculata.*

Tachytes minor Rohwer.

1909. *Tachytes minor* Rohwer, *Trans. Amer. Ent. Soc.*, XXXV, p. 127.

Males 4: Omaha (4); July 14 to August 26; visits flowers of *Chamaecrista fasciculata.*

Tachytes minutus Rohwer.

1909. *Tachytes minutus* Rohwer, *Trans. Amer. Ent. Soc.*, XXXV, p. 128.

Males 2: Omaha, August 13 and 18, 1914 (L. T. Williams).

Tachytes maestus Mickel.

1916. *Tachytes maestus* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 417.

Females 6: Omaha (6); July 31 to August 25.

Tachytes obductus Fox.

1892. *Tachytes obductus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 250.
1913. *Tachytes obductus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 153.

Females 5: Omaha (4) and Ashland (1); July 23 to August 5.

Tachytes mergus Fox.

1892. *Tachytes mergus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 250.
1913. *Tachytes mergus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 157.

Females 8: Omaha (8); July 12 to August 12; visits flowers of *Chamaecrista fasciculata.*

Tachysphex Kohl

KEY TO THE SPECIES

Females

1. Interocular space at vertex always distinctly more than one half the interocular space at the lower edge of the eyes; face with long pile;

vertex with long, erect pile, which is at least as long as the diameter of an antennal joint; vertex and thorax always with well separated punctures, polished. Immediately behind each posterior ocellus is a convexity which resembles a second ocellus, then follows the transverse postocellar impression 2

Interocular space at vertex never distinctly as much as one half the same space at the lower edge of the eyes; vertex glabrous or with very short pile; vertex and thorax often with very fine and close punctures, often subopaque. Immediately behind each posterior ocellus the slope is scarce or not interrupted to the transverse postocellar impression 3

2. Antennae with longer joints, joint three nearly three times the length of its diameter, and about as long as joint four; anterior margin of clypeus with a low blunt tooth or lobe .....*fusus*

Antennae with shorter joints, joint three about two times as long as its diameter and distinctly shorter than joint four; anterior margin of clypeus without a median lobe or else very slightly produced mesad .....*terminatus*

3. Abdomen red or red and black 4

Abdomen black 17

4. At least the tibiae and tarsi reddish, femora more or less red; puncturation of thorax very fine and close 5

Tibiae and femora always black, tarsi more or less so; puncturation of thorax fine or coarse 6

5. Clypeus rounded out for nearly its entire width, a little elevated on its anterior edge mesad, where it is shallowly emarginate, no lateral teeth; clypeus, sometimes thorax in part, femora and abdomen ferruginous; interocular space at vertex a little wider than the length of antennal joints two and three .....*propinquus*

Clypeus distinctly notched mesad on its anterior edge, the two lateral teeth distinct; femora largely and the apex of abdomen, ferruginous; interocular space at vertex about as wide as the length of antennal joints two and three .....*belfragei*

6. Sides of propodeum finely granular, subopaque; posterior face of propodeum coarsely striated, clypeus broadly truncate 7

Sides of propodeum distinctly though not always deeply striate, or striate and punctate combined, shining; mesonotum frequently with close but separate punctures 9

7. Abdomen entirely red; clypeus with one lateral tooth and sometimes with a shallow emargination mesad .....*tarsatus*

Abdomen red and black 8

8. Longer spur of hind tibiae black, shorter than the basitarsus; marginal cell of anterior wings widely and obliquely truncate ....*granulosus*

Longer spur of hind tibiae pale, longer than the basitarsus; marginal cell of anterior wings narrowly and squarely truncate .....*mundus*

9. Interocular space at vertex greater than the length of antennal joints two and three united 10

Interocular space at vertex about equal to the length of antennal joints two and three united 11

10. Interocular space at vertex about equal to the length of antennal joints three and four united; abdomen red, black apically...*nigrocaudatus*

Interocular space at vertex less than the length of antennal joints three and four united; abdomen red and black .....*consimilis*

11. Abdomen entirely red 12

Abdomen about equally red and black 16

12. Second submarginal cell much longer on the radial vein than the third submarginal .....*texanus*

Second and third submarginal cells about equal on the radial vein.. 13

13. Longer spur of hind tibiae longer than the basitarsus; sides of face and front with medium-sized shallow punctures interspersed with exceedingly fine ones .....*puncticeps*

Longer spur of hind tibiae shorter than the basitarsus 14

14. Clypeus emarginate medially; abdomen bright red .....*sanguinosus*

Clypeus entire; abdomen more or less brownish red 15

15. Mesonotum and scutellum with rather sparse, deep punctures, *semirufus*

Mesonotum and scutellum with close, deep punctures; the mesonotum appearing almost granulate .....*zimmeri*

16. Scutellum and mesonotum with rather sparse, very shallow punctures, *erythraeus*

Scutellum and mesonotum with tolerably close, deep punctures, *tenuipunctus*

17. Propodeum reticulate, wings subfuscous, tarsi black .....*acuta*

Propodeum granular, wings hyaline or nearly so 18

18. Longer spur of hind tibiae shorter than the basitarsus ....*punctifrons*

Longer spur of hind tibiae longer than the basitarsus .....*glabrior*

Males

1. Interocular space at vertex about two thirds or more the interocular space at the lower edge of the eyes; upper portion of frons and vertex with rather long, sparse, erect pile, which is about as long as the diameter of an antennal joint; head rather sparsely punctate and polished, pseudo-ocelli present; abdomen red-tipped, rarely entirely black 2

Interocular space at vertex one half or less (seldom a little more than) the same space at the lower edge of the eyes; no long, erect pile on the vertex; no pseudo-ocelli behind the posterior ocelli..... 3

2. Front with rather fine close punctures ..... *terminatus*
   Front with larger separate punctures ..... *fusus*
3. Abdomen red, or red and black 4
   Abdomen entirely black 10
4. Sides of propodeum not striate, or striate only at edges, coriaceous, finely granulate or reticulate 5
   Sides of propodeum distinctly striate throughout, often punctate between the striae 6
5. Abdomen entirely red; tibiae black; stout species ..... *tarsatus*
   Abdomen black apically; tibiae reddish ..... *propinquus*
6. Apex of femora, tibiae and tarsi entirely reddish yellow ..... *minimus*
   At most the tarsi are partly reddish or reddish brown 7
7. Small, slender species; apical half of abdomen black 8
   Larger, stouter species; abdomen all red 9
8. Clypeus slightly rounded or subtruncate on the anterior margin, *nigrocaudatus*
   Clypeus extended medially so as to form a triangular projection on the anterior margin ..... *angularis*
9. Third antennal joint not twice its apical width, antennae rather stout, a little thickened mesad; thorax and propodeum shining, sparsely pilose ..... *texanus*
   Third antennal joint at least twice its apical width, antennae hardly thickened mesad; thorax and propodeum with rather abundant pile, *tarsatus*
10. Width of third submarginal cell along the radius equal to the radius from the third submarginal cell to the truncation; wings subfuscous, *acuta*
    Width of third submarginal cell along the radius not as much as the length of the radius from the third submarginal cell to the truncation; wings nearly or entirely clear 11
11. Apex of femora, and tibiae and tarsi, reddish yellow ..... *minimus*
    At most tarsi in part reddish brown 12
12. Sides of propodeum distinctly striate throughout; vertex shining, rather sparsely punctate; small, length 5–6 mm. ..... *glabrior*
    Sides of propodeum indistinctly striate, granulate 13
13. Wings subhyaline, interocular space at vertex scarcely as great as the length of antennal joints three and four ..... *mundus*
    Wings subfuscous, interocular space at vertex greater than the length of antennal joints three and four ..... *punctifrons*

Tachysphex belfragei (Cresson).

1872. *Larrada belfragei* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 215.
1913. *Tachysphex belfragei* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 164.

Females 3: Omaha (1) and Lincoln (2); July and August; visits flowers of *Euphorbia* sp.

Tachysphex tarsatus (Say).

1823. *Larra tarsata* Say, *West. Quart. Rep.*, II, p. 78.
1893. *Tachysphex tarsatus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 512.
1913. *Tachysphex tarsatus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 165.

Females 3: West Point (1) and Glen (2); June 21 to August 21.

Tachysphex texanus (Cresson).

1872. *Larrada texana* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 214.
1893. *Tachysphex texanus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 513.
1913. *Tachysphex texanus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 166.

Females 2: Ogallala (2), June 24, 1913 (R. W. Dawson).

Tachysphex granulosus Mickel.

1916. *Tachysphex granulosus* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 413.

Females 1: Glen, August 15, 1906 (P. R. Jones).

Tachysphex sanguinosus Mickel.

1916. *Tachysphex sanguinosus* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 414.

Females 1: Omaha, September 8, 1913 (L. T. Williams).

Tachysphex semirufus (Cresson).

1865. *Larrada semirufa* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 464.
1893. *Tachysphex semirufus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 515.

Females 5: Omaha (1), Mitchell (1), Sowbelly Canyon (1), Bad Lands (1) and Sioux county (1); May 28 to July 24.

Tachysphex fusus Fox.

1893. *Tachysphex fusus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 519.
1913. *Tachysphex fusus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 172.

Males 9, females 4; Omaha (5), Glen (2), Sowbelly Canyon (5) and Indian Creek (1); June 23 to August 21; visits flowers of *Chamaecrista fasciculata*.

Tachysphex terminatus (F. Smith).

1856. *Larrada terminata* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 291.
1893. *Tachysphex terminatus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 520.

1913. *Tachysphex terminatus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 172.

Males 4, females 9: Omaha (2), South Bend (1), West Point (2), Fairmont (3), Bridgeport (1), Mitchell (1), Glen (1) and Sowbelly Canyon (2); June 23 to August 20; visits flowers of *Helianthus* sp., *Polonasia* sp. and *Chamaecrista fasciculata.*

Tachysphex acuta (Patton).

1880. *Larra acuta* Patton, *Proc. Bost. Soc. Nat. Hist.*, XX, p. 390.
1893. *Tachysphex acuta* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 521.
1913. *Tachysphex acuta* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 171.

Females 2: Omaha, August 3, 1914 (L. T. Williams), and Lincoln, July.

Tachysphex tenuipunctus Fox.

1893. *Tachysphex tenuipunctus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 525.

Females 1: Monroe Canyon, August 18, 1912 (R. W. Dawson).

Tachysphex consimilis Fox.

1893. *Tachysphex consimilis* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 526.
1913. *Tachysphex consimilis* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 164.

Females 2: Omaha, July 23, 1914 (L. T. Williams), on *Chamaecrista fasciculata,* and Monroe Canyon, August 20, 1908 (R. W. Dawson).

Tachysphex zimmeri Mickel.

1916. *Tachysphex zimmeri* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 415.

Females 1: Monroe Canyon, August 20, 1908 (J. T. Zimmer).

Tachysphex glabrior Williams.

1913. *Tachysphex glabrior* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 170.

Males 1, females 1: South Bend, July 1, 1915 (E. G. Anderson), on *Melilotus alba,* and West Point, June 20, on *Symphoricarpos* sp.

Tachysphex punctifrons (Fox).

1891. *Larra punctifrons* Fox, *Ent. News,* II, p. 194.
1893. *Tachysphex punctifrons* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 531.

Males 4, females 7: West Point (5), Bridgeport (1), Glen (1), Mitchell (2), Glen (1), Monroe Canyon (1) and Jim Creek (1); June 24 to August 4.

Tachysphex mundus Fox.

1893. *Tachysphex mundus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 531.

Females 10: Omaha (3), West Point (1), Carns (3), Mitchell (1), Harrison (1) and Monroe Canyon (1); June to August 21; visits flowers of *Euphorbia* sp. and *Chamaecrista* sp.

Tachysphex minimus (Fox).

1892. *Tachytes minimus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 248.
1893. *Tachysphex minimus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 532.
1913. *Tachysphex minimus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 173.

Males 10: Omaha (1), West Point (8) and Ogallala (1); June 24 to July 23; visits flowers of *Chamaecrista fasciculata*.

Tachysphex erythraeus Mickel.

1916. *Tachysphex erythraeus* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 415.

Females 1: Warbonnet Canyon, June 6, 1901 (M. Cary), on *Erysimum* sp.

Tachysphex nigrocaudatus Williams.

1908. *Tachysphex consimilis* H. S. Smith, Univ. Nebr. Studies, VIII, p. 382.
1913. *Tachysphex nigrocaudatus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 167.

Males 5: Glen (1) and Sowbelly Canyon (4); June 23 to August 20.

Tachysphex angularis Mickel.

1916. *Tachysphex angularis* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 416.

Males 5: Sowbelly Canyon (5), June 23, 1911 (R. W. Dawson).

Tachysphex puncticeps H. S. Smith.

1906. *Tachysphex punctulatus* H. S. Smith, *Ent. News*, XVII, p. 246 (nec Kohl).

1908. *Tachysphex puncticeps* H. S. Smith, Univ. Nebr. Studies, VIII, p. 381.

Females 1: Sioux county; May.

Tachysphex propinquus Viereck.

1904. *Tachysphex propinquus* Viereck, *Ent. News*, XV, p. 87.
1913. *Tachysphex propinquus* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 162.

Males 1, females 5: Louisville (2), Ogallala (1) and Harrison (1); June 24 to August 15; visits flowers of *Solidago glaberrima*.

ASTATINAE

KEY TO THE GENERA

Marginal cell along the costal margin much longer than the stigma; eyes in the male holoptic ..... *Astatus*
Marginal cell along the costal margin not longer than the stigma, most frequently shorter; eyes in the male normal, not holoptic; tarsal comb long, distinct; tibiae spinous ..... *Diploplectron*

Astatus Latreille

KEY TO THE SPECIES

1. Insect without red markings 2
   Insect with at least the base of the abdomen red 3
2. Pubescence of thorax whitish ..... *unicolor*
   Pubescence of thorax black ..... *nubeculus*
3. Marginal cell distinctly shorter than the first submarginal; propodeum finely granulate ..... *asper*
   Marginal cell generally as long or longer than the first submarginal; propodeum rather coarsely reticulate 4
4. Propodeum coarsely reticulated, with a central longitudinal ridge, *bicolor*
   Propodeum more finely reticulate, without a longitudinal ridge down the center ..... *nevadicus*

Astatus unicolor Say.

1824. *Astata unicolor* Say, *Long's Exped.*, II, App., p. 337.
1893. *Astatus unicolor* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 541.

Males 36, females 10: Omaha (25), Meadow (1), Weeping Water (3), Lincoln (9), Haigler (2), Imperial (1), Mitchell (2), Glen (1) and Monroe Canyon (2); June 24 to September

3; visits flowers of *Chamaecrista fasciculata, Melilotus alba* and *Cleome serrulata.*

Astatus nubeculus Cresson.

1865. *Astata nubecula* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 466.
1893. *Astatus nubeculus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 543.

Females 2: Lincoln, June, and Haigler, August 20, 1909 (C. H. Gable). Variety A: Males 2, females 1: Monroe Canyon (1) and Sioux county (2).

Astatus bicolor Say.

1823. *Astata bicolor* Say, *West. Quart. Rep.*, II, p. 78.
1893. *Astatus bicolor* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 544.

Males 8, females 10: Omaha (4), Weeping Water (1), Lincoln (4), Monroe Canyon (2), Bad Lands (1) and Glen (1); July 9 to September 18; visits flowers of *Melilotus alba, Chamaecrista fasciculata* and *Euphorbia* sp.

A specimen taken at Lincoln had attacked a nymph of *Pentatomidae* sp. and was dragging it away.

Astatus asper Fox.

1893. *Astatus asper* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 546.

Females 1: Glen, August 13, 1906 (H. S. Smith).

Astatus nevadicus Cresson.

1881. *Astata nevadica* Cresson, *Trans. Amer. Ent. Soc.*, I, p. v.
1893. *Astatus nevadicus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 540.

Females 2: Glen (2), August 20, 1906 (H. S. Smith), and August 21, 1906 (P. R. Jones).

Diploplectron Fox

Diploplectron ferrugineus Ashmead.

1899. *Diploplectron ferrugineus* Ashmead, *Ent. News*, X, p. 56.

Females 2: Glen (2), August 14, 1906 (L. Bruner), and August 21, 1906 (P. R. Jones).

PEMPHREDONINAE

KEY TO THE TRIBES

Eyes small, their inner margins subparallel or converging to clypeus; head usually quadrate or subquadrate, well developed behind eyes; species shining; episternauli present except in *Spilomena*; usually nest in wood, *Pemphredonini*

Eyes large, their inner margins converging to vertex; head subtransverse, scarcely developed behind eyes; species opaque; episternauli wanting; nest in sand ..... *Miscophini*

PEMPHREDONINI

KEY TO THE GENERA

1. Anterior wings with only one recurrent nervure; abdomen with a distinct petiole ..... *Stigmus*
   Anterior wings with two recurrent nervures 2
2. Abdomen with the petiole longer than the hind coxae; mandibles tridentate ..... *Pemphredon*
   Abdomen with the petiole never longer than the hind coxae 3
3. Hind tibiae along the outer face spinous or subserrate; clypeus at apex emarginate ..... *Xylocelia*
   Hind tibiae along the outer face smooth, unarmed; labrum triangularly produced ..... *Passaloecus*

Stigmus Panzer

KEY TO THE SPECIES

Females

Clypeus not bilobate, at the most slightly emarginate medially; third joint of antennae longer than the fourth; length 4 mm. ..... *americanus*

Clypeus distinctly bilobate medially; dorsulum with very fine longitudinal striations ..... *fulvipes*

Stigmus americanus Packard.

1867. *Stigmus americanus* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 386.
1892. *Stigmus americanus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 322.

Males 4, females 4: Omaha (3), Glen (4); July 15 to August 20.

Stigmus fulvipes Fox.

1892. *Stigmus fulvipes* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 324.

Females 1: Bad Lands, August 10, 1908 (L. Bruner).

Pemphredon Latreille

Pemphredon inornatus Say.

1824. *Pempredon inornatus* Say, *Long's Exped.*, II, App., p. 339.
1892. *Pemphredon inornatus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 312.

Males 4, females 6: Omaha (6), Lincoln (1), Fairmont (1), Monroe Canyon (1) and Bad Lands (1); May 20 to August 18.

Xylocelia Rohwer

KEY TO THE SPECIES

Females

1. Mandibles yellowish or whitish 2
   Mandibles entirely black; mesonotum not densely punctate before the scutellum; striato-punctate at the base; front striato-punctate..*ater*
2. Tubercles black 3
   Tubercles yellowish 5
3. Posterior face of propodeum without any wedge-shaped fovea, the entire surface coarsely reticulate; legs more or less testaceous; labrum broadly and shallowly emarginate .....*spiniferus*
   Posterior face of propodeum with a median, moderately deep, wedge-shaped fovea; remainder of posterior face finely, irregularly rugose 4
4. Apical antennal joint with a strong longitudinal furrow beneath; all the tibiae testaceous; emargination of labrum broad and deep, *antennatus*
   Apical antennal joint not furrowed beneath, simple; all the tarsi more or less blackish; emargination of labrum narrow, moderately deep, *metathoracicus*
5. All the tibiae yellowish or light testaceous; nervures of wings testaceous; front sparsely punctate .....*occidentalis*
   Middle and hind tibiae more or less blackish; wing nervures blackish. 6
6. Front rather densely punctate; abdomen distinctly petiolate ....*gillettei*
   Front sparsely but distinctly punctate; abdomen not distinctly petiolate, subsessile; posterior face of propodeum coarsely reticulate, *siouxensis*

Males

1. Mandibles entirely black; tubercles yellowish; antennal joints 8–12 serrate beneath .....*macstus*
   Mandibles yellowish or whitish 2
2. Tubercles black .....*rugosus*
   Tubercles yellowish .....*occidentalis*

Xylocelia occidentalis (Fox).

1892. *Diodontus occidentalis* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 315.

Males 4, females 1: Mitchell (1), Glen (2), Monroe Canyon (2) and Sowbelly Canyon (1); June 14 to August 20.

Xylocelia rugosus (Fox).

1892. *Diodontus rugosus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 315.

Males 2: Omaha (2), July 2, 1913, and August 1, 1914 (L. T. Williams).

Xylocelia maestus Mickel.

1916. *Xylocelia maestus* Mickel, *Ann. Ent. Soc. Amer.*, IX, p. 347.

Males 2: Omaha (2), August 29, 1914 (L. T. Williams).

Xylocelia spiniferus Mickel.

1916. *Xylocelia spiniferus* Mickel, *Ann. Ent. Soc. Amer.*, IX, p. 348.

Females 6: Omaha (6); June 12 to July 20.

Xylocelia antennatus Mickel.

1916. *Xylocelia antennatus* Mickel, *Ann. Ent. Soc. Amer.*, IX, p. 348.

Females 1: Omaha, July 15, 1914 (L. T. Williams).

Xylocelia metathoracicus Mickel.

1916. *Xylocelia metathoracicus* Mickel, *Ann. Ent. Soc. Amer.*, IX, p. 349.

Females 1: Omaha, July 2, 1913 (L. T. Williams).

Xylocelia siouxensis Mickel.

1916. *Xylocelia siouxensis* Mickel, *Ann. Ent. Soc. Amer.*, IX, p. 350.

Females 1: Monroe Canyon, August 19, 1912 (R. W. Dawson).

Xylocelia gillettei (Fox).

1892. *Diodontus Gillettei* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 316.

Females 1: Harrison, August 20, 1912 (R. W. Dawson).

Xylocelia ater Mickel.

1908. *Diodontus nigritus* H. S. Smith, Univ. Nebr. Studies, VIII, p. 393 (nec. Fox).

1916. *Xylocelia ater* Mickel, *Ann. Ent. Soc. Amer.*, IX, p. 351.

Females 5: Omaha (4); June 20 to August 29.

Passaloecus Shuckard

KEY TO THE SPECIES

Females

Third antennal joint distinctly longer than the fourth; the two longitudinal parallel impressions on anterior portion of mesonotum not foveolate; legs black; anterior tibiae in front and base of the four hind tibiae, yellow; tarsi testaceous; length 6–8 mm, ...*mandibularis*

Third antennal joint not longer than the fourth; the two longitudinal impressed lines on the anterior portion of mesonotum strongly foveolate; apex of femora, tibiae and tarsi, yellow testaceous; length 5 mm., *annulatus*

Males

Antennae not spinose or dentate beneath, but strongly rounded out, black above, white beneath; two impressed lines on anterior portion of mesonotum strongly foveolate .....*annulatus*

Antennal joints 5–9 beneath spinose at tip; antennae black beneath, *mandibularis*

Passaloecus annulatus (Say).

1837. *Pemphredon annulatus* Say, *Bost. Journ. Nat. Hist.*, I, p. 379.
1892. *Passaloecus annulatus* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 318.
1908. *Passaloecus mandibularis* H. S. Smith, Univ. Nebr. Studies, VIII, p. 393.

Females 7: Glen (7); August 13 to 20; visits flowers of *Solidago* sp.

Passaloecus mandibularis (Cresson).

1865. *Pempredon mandibularis* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 487.
1892. *Passaloecus mandibularis* Fox, *Trans. Amer. Ent. Soc.*, XIX, p. 320.

Females 1: Monroe Canyon, August 19, 1912 (R. W. Dawson).

MISCOPHINI

KEY TO THE GENERA

1. Front wings with one or two cubital cells, or with none, pygidial area wanting .....*Miscophus*

Front wings with two or three cubital cells; pygidial area present; marginal cell most frequently but not always truncate, with an appendage 2

2. Mandibles strongly excised beneath; pygidial area of female well defined, broad and shining; clypeus of male with a fringe of hair on either side ..... *Plenoculus*
   Mandibles not or very feebly excised beneath; pygidium of female hardly or not shining 3
3. Hind femora normal, more or less fusiform; pygidial area poorly defined or lacking; marginal cell usually truncate and appendiculate at the apex ..... *Niteliopsis*
   Hind femora thickest apically; pygidial area well defined, pilose in both sexes; marginal cell lanceolate, not appendiculate... *Bothynostethus*

Miscophus Jurine

Miscophus americanus Fox.

1890. *Miscophus americanus* Fox, *Ent. News,* I, p. 138.
1891. *Miscophus americanus* Fox, *Ent. News,* II, p. 196.
1913. *Miscophus americanus* Williams, *Kans. Univ. Sci. Bull.,* VIII, p. 179.

Females 1: Omaha, August 13, 1914 (L. T. Williams).

Plenoculus Fox

KEY TO THE SPECIES

1. Abdomen red, black apically ..... *apicalis*
   Abdomen black 2
2. Mandibles reddish medially; hind tibiae and tarsi not at all yellowish, *propinquus*
   Mandibles and hind tibiae and tarsi more or less yellowish ..... *davisi*

Plenoculus propinquus Fox.

1893. *Plenoculus propinquus* Fox, *Proc. Acad. Nat. Sc. Phil.,* p. 536.
1899. *Plenoculus propinquus* Ashmead, *Psyche,* VIII, p. 338.

Females 2: Mitchell, June 27, 1913 (L. M. Gates), and Glen, August 20, 1906 (H. S. Smith).

Plenoculus davisi Fox.

1893. *Plenoculus davisii* Fox, *Psyche,* VI, p. 544.
1893. *Plenoculus davisii* Fox, *Proc. Acad. Nat. Sc. Phil.,* p. 536.
1913. *Plenoculus davisi* Williams, *Kans. Univ. Sc. Bull.,* VIII, p. 175.

Females 6: Omaha (4) and West Point (2); June to August 20; visits flowers of *Chamaecrista fasciculata.*

Plenoculus apicalis Williams.

1913. *Plenoculus apicalis* Williams, *Kans. Univ. Sc. Bull.*, VIII, p. 175.

Males 1: Mitchell, September 9, 1915 (E. M. Partridge).

Niteliopsis Saunders

Niteliopsis plenoculoides Fox.

1893. *Niteliopsis plenoculoides* Fox, *Psyche*, VI, p. 555.
1909. *Niteliopsis plenoculoides* Rohwer, *Trans. Amer. Ent. Soc.*, XXXV, p. 114.

Males 1, females 2: Sowbelly Canyon (3), June 23, 1911 (R. W. Dawson).

Bothynostethus Kohl

Bothynostethus distinctus (Fox).

1891. *Nysson distinctus* Fox, *Ent. News*, II, p. 31.
1893. *Bothynostethus distinctus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 551.
1913. *Bothynostethus distinctus* Williams, *Kans. Univ. Sci. Bull.*, VIII, p. 179.

Females 1: Omaha, July 16, 1914 (L. T. Williams), on *Chamaecrista fasciculata*.

BEMBICIDAE

KEY TO THE SUBFAMILIES

Labrum small, very much shorter than the dorso-ventral length of clypeus; intermediate tibiae with two apical spurs ..... *Stizinae*

Labrum very large, often longer than the dorso-ventral length of the clypeus; intermediate tibiae with one apical spur ..... *Bembicinae*

STIZINAE

KEY TO THE GENERA

Marginal cell about twice as long as first cubital; spurs of hind tibiae enlarged in the female, and the pygidium well developed; abdomen of the male with a single spine at apex ..... *Sphecius*

Marginal cell much shorter than the first cubital; spurs of hind tibiae short in both sexes, not enlarged; no pygidium; at the most with two short ridges on each side of the apical portion of last abdominal segment; abdomen of the male with three spines at apex ..... *Stizus*

Sphecius Dahlbom

Sphecius speciosus (Drury).

1773. *Sphex speciosus* Drury, *Ill. Nat. Hist.*, II, p. 71.
1895. *Sphecius speciosus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 265.

Males 22, females 7: Omaha (15), South Bend (2), Lincoln (2) and Haigler (6); April 20 to August 28.

Stizus Latreille

KEY TO THE SPECIES

1. Females 2
   Males 7
2. Propodeum emarginate posteriorly at the sides 3
   Propodeum not emarginate, the postero-lateral angles rounded 6
3. Second cubital cell not petiolate 4
   Second cubital cell distinctly petiolate 5
4. Band on tergite five; distance between posterior ocelli slightly greater than the distance between them and the nearest eye-margin, *neglectus*
   No band on tergite five; only medial and lateral spots; distance between posterior ocelli about equal to the distance between them and the nearest eye-margin ..... *strenuus*
5. Antennae placed at about the same distance from the clypeus as from the eyes; space between hind ocelli just about equal to that between them and nearest eye-margin; not densely hirsute; tibiae only in part yellow; hind tarsi entirely black ..... *godmani*
   Antennae placed somewhat farther away from the clypeus than from the eye-margin; space between the hind ocelli greater than that between them and nearest eye-margin; rather densely hirsute; tibiae and tarsi entirely yellow ..... *nanus*
6. First and second transverse cubital nervures widely separated above; size very large, 26–28 mm. ..... *brevipennis*
   First and second transverse cubital nervures narrowly separated or meeting at the marginal cell; size, 15–18 mm. ..... *unicinctus*
7. Propodeum emarginate posteriorly at the sides; twelfth antennal joint spinose beneath 8
   Propodeum not emarginate, the postero-lateral angles rounded; twelfth antennal joint not spinose 12
8. Black, with paler markings 9
   Yellow, with black markings 11
9. Seventh ventral segment slightly carinated down the middle; tibiae in part black ..... *godmani*

Seventh ventral segment flat, not carinated 10
10. Tibiae entirely yellow .....*nanus*
Tibiae black and yellow .....*strenuus*
11. Second cubital cell distinctly petiolate .....*flavus*
Second cubital cell not petiolate .....*xanthochrous*
12. First and second transverse cubital nervures widely separated above; size large, over 23 mm. .....*brevipennis*
First and second transverse cubital nervures narrowly separated above or meeting; size smaller, 15–18 mm. .....*unicinctus*

Stizus godmani Cameron.

1890. *Stizus godmani* Cameron, *Biol. Centr. Amer. Hym.*, p. 102, pl. V, fig. 8.
1895. *Stizus godmani* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 267.

Males 6, females 13: Bridgeport (2), Mitchell (17); July 11 to September 6.

Stizus nanus Handlirsch.

1892. *Stizus nanus* Handlirsch, *Sitzb. Akad. Wissensch.*, Wien, LI, Bd., Abth., I, p. 61.
1895. *Stizus nanus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 267.

Males 1, females 1: West Point (1) and Carns (1); July; visits flowers of *Euphorbia* sp.

Stizus strenuus Mickel.

1918. *Stizus strenuus* Mickel, Univ. Nebr. Studies, XVII, p. 331.

Males 3, females 2: Bridgeport (5); July 11, 1917 (C. E. Mickel).

Stizus flavus Cameron.

1890. *Stizus flavus* Cameron, *Biol. Centr. Amer. Hym.*, p. 103, pl. V, fig. 9.
1895. *Stizus flavus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 268.

Males 12: Bridgeport (1) and Mitchell (11); July 11 to September 6; visits flowers of *Melilotus alba*.

Stizus xanthochrous Handlirsch.

1892. *Stizus xanthochrous* Handlirsch, *Sitzb. Akad. Wissensch.*, Wien, LI, Bd., Abth., I, p. 69, pl. I, figs. 9, 10.
1895. *Stizus xanthochrous* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 268.

Males 12: Omaha (12); June 24 to July 14; visits flowers of *Chamaecrista fasciculata*.

Stizus neglectus (Cresson).

1872. *Monedula neglecta* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 222.
1895. *Stizus neglectus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 268.

Females 14: Omaha (13) and Lincoln (1); July 7 to September 5; visits flowers of *Chamaecrista fasciculata.*

Stizus unicinctus Say.

1823. *Stizus unicinctus* Say, *West. Quart. Rep.*, II, p. 77.
1895. *Stizus unicinctus* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 268.

Males 77, females 40: Omaha (1), South Bend (1), Lincoln (11), Fairmont (16), Maskell (1), Carns (4), Trenton (7), Haigler (1), Mitchell (63), Pine Bluffs (1), Bad Lands (1) and Sioux county (1); June 20 to September 26; visits flowers of *Melilotus alba, Achillea millefolium* and *Asclepias* sp.

Stizus brevipennis Walsh.

1869. *Stizus brevipennis* Walsh *Amer. Ent.*, I, p. 162.
1895. *Stizus brevipennis* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 268.

Males 6, females 1: Omaha (1), Meadow (1), Lincoln (2), Red Cloud (2) and Carns (1); July 21 to August 13.

BEMBICINAE

KEY TO THE GENERA

1. Anterior ocellar cicatrix circular or elliptical in form, placed in a pit; eighth sternite ending in three spines, and in many species bearing a fourth discal spine ..... *Stictiella*
   Anterior ocellar cicatrix linear, transverse, straight or curved, in a few species the ocellus not completely obliterated 2
2. Posterior surface of propodeum concave, its lateral angles prolonged, compressed and wedge-like; maxillary palpi with six segments, labial with four; eighth sternite of male ending in three spines... *Bicyrtes*
   Posterior surface of propodeum flat or convex, its lateral angles rounded; palpi otherwise; eighth sternite of male ending in a single spine 3
3. Mandibles dentate; apical end of radial cell of anterior wing on costal border; maxillary palpi with four segments, labial with two. *Bembix*
   Mandibles not dentate; apical end of radial cell of anterior wing not on costal border; maxillary palpi with three segments, labial with one ..... *Microbembex*

Stictiella Parker

KEY TO THE SPECIES

Females

1. Mesonotum with a U-shaped yellow mark, eyes convergent above; length 16–22 mm. ..... *speciosa*
   Mesonotum at most with two longitudinal yellow marks 2
2. Pulvilli small, indistinct; clypeus basally, mesepisterna, femora (except apically), tibiae within, black; tarsi dark testaceous; venter black, *plana*
   Pulvilli large and distinct 3
3. Head small, narrower than thorax (head and thorax more hairy than usual); no marks on mesonotum or mesepisterna ..... *emarginata*
   Head as usual, as wide as thorax 4
4. Length 12–15 mm.; mesosternum in greater part black; front and vertex clothed with long, pale grayish hair; puncturation of mesonotum very dense, almost granular; fasciae of tergites deeply emarginate anteriorly ..... *pictifrons*
   Length 9 mm.; mesosternum almost entirely yellow; front and vertex with sparse, rather short, pale hair; puncturation of mesonotum distinct; fasciae of tergites, the first excepted, scarcely emarginate, *exigua*

Males

1. Intermediate femora smooth beneath; second sternite flat, not tuberculate ..... *pictifrons*
   Intermediate femora serrate or carinate beneath, or broadly emarginate 2
2. Eighth sternite with a discal spine 3
   Eighth sternite without a discal spine 4
3. Apical joint of fore tarsi greatly enlarged; fore femora flattened; second sternite unarmed ..... *speciosa*
   Apical joint of fore tarsi not enlarged; fore femora not flattened; second sternite with two approximate tubercles near the posterior margin; puvilli distinct ..... *emarginata*
4. Second sternite flat not tuberculate; mesepisterna and propodeum not at all yellow ..... *plana*
   Second sternite tuberculate 5
5. Size large, 20–22 mm.; apical joint of fore tarsi greatly enlarged, blackish; second sternite bituberculate; intermediate femora beneath with a row of short spines ..... *spinifera*
   Size smaller, 11–13 mm.; apical joint of fore tarsi not greatly enlarged; intermediate femora beneath strongly carinated, the carination broadly and shallowly concave; first joint of intermediate tarsi much broadened ..... *exigua*

Stictiella pictifrons (F. Smith).

1856. *Monedula pictifrons* F. Smith, *Cat. Hym. Brit. Mus.*, IV, p. 355.
1895. *Monedula pictifrons* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 368.

Females 2: Omaha (1), July 7, 1914 (L. T. Williams), on *Melilotus alba*, and Weeping Water, July 20 (H. S. Smith).

Stictiella plana (Fox).

1895. *Monedula plana* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 367.

Males 4, females 7: McCook (1), Halsey (3), Mitchell (6) and Glen (1); July 10 to August 15; visits flowers of *Melilotus alba*.

Stictiella emarginata (Cresson).

1865. *Monedula emarginata* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 468.
1895. *Monedula emarginata* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 368.

Males 4, females 4: South Sioux City (1), Maskell (2), Mitchell (1) and Warbonnet Canyon (4); June 28 to August 4; visits flowers of *Monarda* sp., *Medicago sativa*, *Helianthus* sp., *Solidago* sp. and *Symphoricarpos occidentalis*.

Stictiella speciosa (Cresson).

1865. *Monedula speciosa* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 470.
1895. *Monedula speciosa* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 366.
1908. *Monedula speciosa* Cameron, *Trans. Amer. Ent. Soc.*, XXXIV, p. 236.

Females 6: Haigler (1), Sidney (4) and Mitchell (1); August.

Stictiella spinifera (Mickel).

1916. *Stictia spinifera* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 418.
1917. *Stictiella spinifera* Mickel, *Can. Ent.*, XLIX, p. 285.

Males 3: McCook (2) and Glen (1); July and August.

Stictiella exigua (Fox).

1895. *Monedula exigua* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 370.
1916. *Stictia exigua* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 419.
1917. *Stictiella exigua* Parker, *Proc. U. S. Nat. Mus.*, LII, p. 50.
1917. *Stictiella divergens* Mickel, *Can. Ent.*, XLIX, p. 285.

Males 2, females 6: Glen (7) and Warbonnet Canyon (1); July 12 to August 17.

Bicyrtes LePeletier

KEY TO THE SPECIES

Females

1. Posterior coxae strongly dentate beneath (wings smoky) ..... *fodiens*
   Posterior coxae unarmed 2
2. Abdomen with a strongly marked pygidial area, the lateral ridges strong; legs ferruginous ..... *capnoptera*
   Abdomen without a strongly marked pygidial area, the lateral ridge feeble, if present; wings scarcely smoky 3
3. Mesepisterna marked with yellow; ultimate tergite black; anterior wings not clouded ..... *quadrifasciata*
   Mesepisterna black; flagellum black; apex of ultimate tergite black, *ventralis*

Males

1. Posterior coxae armed with a tooth beneath ..... *fodiens*
   Posterior coxae unarmed 2
2. Intermediate femora beneath at the base drawn out into a prominent tooth; joints 7–10 of antennae strongly rounded out beneath; clypeus black, or whitish at base only ..... *ventralis*
   Intermediate femora not dentate beneath at base, at the most angular 3
3. Legs not ferruginous in part; wings, if dusky, but slightly so; intermediate femora beneath distinctly keeled, or angular at base, *quadrifasciata*
   Legs ferruginous and yellow; wings dusky; intermediate femora beneath distinctly keeled and angulate at base ..... *capnoptera*

Bicyrtes fodiens (Handlirsch).

1889. *Bembidula fodiens* Handlirsch, *Sitz. Akad. Wissensch.*, Wien, XCVIII, p. 497.
1895. *Bembidula fodiens* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 354.
1917. *Bicyrtes fodiens* Parker, *Proc. U. S. Nat. Mus.*, LII, p. 60.

Males 1, females 1: Meadow (1), July, 1903, and Louisville (1), July 5, 1915 (E. G. Anderson).

Bicyrtes ventralis (Say).

1824. *Monedula ventralis* Say, *Exped. St. Peter's River*, II, p. 336.
1895. *Bembidula ventralis* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 353.
1917. *Bicyrtes ventralis* Parker, *Proc. U. S. Nat. Mus.*, LII, p. 62.

Males 31, females 13: Nebraska City (1), Omaha (8), South Bend (3), Lincoln (2), Cedar Bluffs (2), Neligh (1), Carns (3), Halsey (1), Mitchell (13), Gordon (1), Glen (8), Monroe

Canyon (1) and Warbonnet Canyon (1); June 25 to September 27; visits flowers of *Ratibida columnaris, Melilotus alba, Helianthus* sp., *Solidago* sp. and *Gutierrezia sarothrae.*

Bicyrtes quadrifasciata (Say).

1824. *Monedula 4-fasciata* Say, *Exped. St. Peter's River,* II, p. 336.
1895. *Bembidula quadrifasciata* Fox, *Proc. Acad. Nat. Sc. Phil.,* p. 353.
1917. *Bicyrtes quadrifasciata* Parker, *Proc. U. S. Nat. Mus.,* LII, p. 65.

Males 16, females 9: Omaha (14), Louisville (8), South Bend (1), Meadow (1) and Haigler (1); July 4 to September 12; visits flowers of *Melilotus alba, Symphoricarpos symphoricarpos* and *Solidago glaberrima.*

Bicyrtes capnoptera (Handlirsch).

1889. *Bembidula capnoptera* Handlirsch, *Sitz. Akad. Wissensch.,* Wien, XCVIII, p. 497.
1895. *Bembidula capnoptera* Fox, *Proc. Acad. Nat. Sc. Phil.,* p. 354.
1917. *Bicyrtes capnoptera* Parker, *Proc. U. S. Nat. Mus.,* LII, p. 72.

Males 2, females 5: Mitchell (7); July 20 to September 4; visits flowers of *Medicago sativa.*

Bembix Fabricius

KEY TO THE SPECIES

Females

1. Neither metanotum nor propodeum above (excluding postero-lateral angles) marked with yellow 2
   Metanotum or propodeum above or both marked with yellow 5
2. Fasciae on all tergites interrupted medially 3
   A part or all of the fasciae on tergites continuous 4
3. Ultimate tergite strongly wrinkled ..... *belfragei*
   Ultimate tergite not wrinkled, punctate ..... *spinolae*
4. Sides of thorax and propodeum with evident maculations.. *primaaestate*
   Sides of thorax and propodeum black, rarely with inconspicuous maculation of mesepisterna above ..... *spinolae*
5. Wings distinctly clouded medially ..... *nubilipennis*
   Wings clear 6
6. Mesonotum with no trace of discal marks 7
   Mesonotum with more or less well developed discal marks 8

7. Large, 17–20 mm.; eyes divergent at clypeus; frons narrow; fasciae on tergites continuous ..... *pruinosa*
   Smaller, 14–16 mm.; eyes very slightly divergent at vertex; frons relatively wide; fascia on first tergite almost always interrupted, *primaaestate*
8. First transverse cubital vein but slightly bent; development of ocelli unusual; yellow on sternites limited to lateral spots on 2–4.. *arcuata*
   First transverse cubital vein normal; ocellar cicatrices normal 9
9. Species large, 17–20 mm.; discal marks on mesonotum in form of a U, complete or broken into spots ..... *sayi*
   Species smaller, under 17 mm.; discal marks on mesonotum consisting of a pair of narrow lines ..... *primaaestate*

Males

1. Intermediate femora smooth; not distinctly serrate or dentate; second and sixth sternites without processes ..... *pruinosa*
   Intermediate femora distinctly serrate or dentate 2
2. Second and sixth sternites without processes, plain; sternites 2–4 for the most part black ..... *arcuata*
   Second and sixth sternites with more or less well developed processes 3
3. Process on sixth sternite prominent, its ventral surface flattened and bifurcate at apex; spur on the middle tibiae not reaching to or beyond the middle point of the basitarsus ..... *sayi*
   Process on sixth sternite a transverse ridge not sharply pointed but slightly curved on either side the midline; fasciae on tergite interrupted ..... *belfragei*
   Process of sixth sternite prominent, flattened and bluntly pointed; an additional pair of small processes or ridges on this same sternite, *nubilipennis*
   Process on sixth sternite not as above; relatively small, acutely pointed or if flattened the sixth sternite lacks the lateral processes or ridges 4
4. Ultimate tergite black ..... *spinolae*
   Ultimate tergite maculated; fasciae on tergites greenish-yellow, *primaaestate*

Bembix arcuata Parker.

1917. *Bembix arcuata* Parker, *Proc. U. S. Nat. Mus.*, LII, p. 81

Males 3: McCook (3), July, 1903 (M. H. Swenk).

Bembix nubilipennis Cresson.

1872. *Bembex nubilipennis* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 218.
1895. *Bembex nubilipennis* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 361.
1917. *Bembix nubilipennis* Parker, *Proc. U. S. Nat. Mus.*, LII, p. 87.

Males 5, females 41: Omaha (5), Louisville (3), Lincoln (23), Fairmont (2), Holdrege (1), Culbertson (1) and Curtis (10); July 3 to September 8; visits flowers of *Medicago sativa, Verbena stricta, Petalostemum* sp. and *Cleome serrulata.*

Bembix sayi Cresson.

1865. *Bembex Sayi* Cresson, *Proc. Ent. Soc. Phil.*, IV, p. 467.
1895. *Bembex Sayi* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 359.
1917. *Bembix sayi* Parker, *Proc. U. S. Nat. Mus.*, LII, p. 90.

Males 19, females 8: Lincoln (3), Fairmont (1), Haigler (2), Imperial (4), North Platte (1), Halsey (1) and Mitchell (15); June 22 to August 17; visits flowers of *Verbena stricta, Helianthus petiolaris* and *Medicago sativa.*

Bembix belfragei.

1873. *Bembex belfragei* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 220.
1895. *Bembex belfragei* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 357.

Males 3, females 3: Omaha (1), West Point (1), McCook (2), Haigler (1) and Halsey (1); June to August 24; visits flowers of *Petalostemum purpureum.*

Bembix spinolae LePeletier.

1845. *Bembex Spinolae* LePeletier, *Hist. Nat. Ins., Hym.*, III, p. 277.
1895. *Bembex Spinolae* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 357.
1908. *Bembex spinolae* H. S. Smith, Univ. Nebr. Studies, VIII, p. 386.
1908. *Bembex spinolae* Johnson and Rohwer, *Ent. News*, XIX, p. 378.

Females 219: Child's Point (2), Omaha (47), Louisville (19), Lincoln (16), Fairmont (7), Cedar Bluffs (1), South Sioux City (4), Niobrara (1), Norfolk (1), Neligh (1), Red Cloud (3), McCook (1), Haigler (3), Halsey (5), Valentine (2), Mitchell (87), Glen (12), Harrison (3) and Monroe Canyon (5); June 18 to October 11; visits flowers of *Chamaecrista* sp., *Symphoricarpos symphoricarpos, Verbena hastata, Asclepias incarnata, Solidago glaberrima, Verbena stricta, Petalostemum violaceus, Mentha canadensis, Gaillardia pulchella, Medicago sativa* and *Melilotus alba.*

Bembix primaaestate Johnson and Rohwer.

1908. *Bembex primaaestate* Johnson and Rohwer, *Ent. News*, XIX, p. 378.

Females 12: Mitchell (5), Glen (5), Monroe Canyon (1) and Warbonnet Canyon (1); July 11 to August 14; visits flowers of *Petalostemum* sp. and *Medicago sativa.*

Bembix pruinosa Fox.

1895. *Bembex pruinosa* Fox, *Proc. Acad. Nat. Sc. Phil.*, p. 361.

Males 6, females 11: Child's Point (1), Omaha (6), Louisville (2) and South Bend (1); July 2 to September 3; visits flowers of *Solidago canadensis, Asclepias verticillata* and *Melilotus alba.*

Microbembex Patton

Microbembex monodonta Say.

1824. *Bembex monodonta* Say, *Long's Exped.*, II, App., p. 355.
1895. *Microbembex monodonta* Say, *Proc. Acad. Nat. Sc. Phil.*, p. 363.
1908. *Microbembex monodonta* Johnson and Rohwer, *Ent. News*, XIX, p. 374.

Males 23, females 51: Omaha (15), Louisville (5), South Bend (13), Ashland (27), Lincoln (2), Cedar Bluffs (1), West Point (2), Neligh (3), Haigler (1), Halsey (1), Mitchell (3) and Gordon Creek (1); June 13 to September 30; visits flowers of *Melilotus alba, Solidago glaberrima, Vernonia fasciculata, Medicago sativa, Verbena stricta, Asclepias syriaca, Asclepias sullivanti* and *Aster salicifolius.*

CERCERIDAE

KEY TO THE GENERA

Third cubital cell not quadrate, the third transverse cubital vein oblique, joining the radial cell much before the apex; second cubital cell petiolate; abdominal tergites 2–6 without a median transverse furrow or impression, but usually margined at the apex ..... *Cerceris*

Third cubital cell quadrate, the third transverse cubital vein joining the radial cell at the apex; second cubital cell petiolate in the female, not petiolate in the male; abdominal tergites 2–4 in male, 2–6 in female, with a median transverse furrow or impression ..... *Eucerceris*

Cerceris Latreille

KEY TO THE SPECIES

Females

1. Clypeus with an elevation or process with a free apical edge 2
   Clypeus without such elevation, although more or less swollen 25
2. The clypeal process erect, and as long or longer than broad 3
   The clypeal process much broader than long, or not erect 5
3. Clypeal process deeply, roundly emarginate, the apica lateral angles appearing as long teeth; vertex red clear across .....*alceste*
   Clypeal process entire; head black and yellow 4
4. Enclosure of propodeum more or less smooth or longitudinally striate, very narrow yellow bands on tergites three, four and five ..*clypeata*
   Enclosure of propodeum obliquely striate at the sides, no yellow bands on tergites three, four and five .....*gnara*
5. First, and often second abdominal segments mostly reddish 6
   First abdominal segment black 13
6. Enclosure of propodeum either transversely or longitudinally striated. 7
   Enclosure of propodeum smooth or punctate at the sides 11
7. Enclosure of propodeum transversely striated; mesepisterna with a spine before the intermediate coxae; propodeum red 8
   Enclosure of propodeum longitudinally striate; mesepisterna not spined; propodeum not red 9
8. First two segments of abdomen largely red; clypeus very strongly bidentate at the apex; markings whitish .....*conifrons*
   Only the first segment of abdomen red 10
9. Pygidial area narrowed and rounded at the apex; clypeal projection narrower at the tip than at the base .....*argia*
   Pygidial area narrowed and distinctly truncate at the apex; clypeal projection in the form of a transverse ridge .....*echo*
10. Yellow abdominal bands broad, occupying the tergites almost entirely; projection of clypeus narrower apically than at base .....*vicina*
    Yellow abdominal bands narrow, occupying about one fourth of tergites; projection of clypeus as broad at apex as at base, quite deeply concave .....*nebrascensis*
11. Clypeal process entire or quadrate .....*alacris*
    Clypeal process deeply emarginate, appearing lunate 12
12. Lateral angles of clypeal process not much elevated; abdomen yellowish only on basal segments; wings dark .....*bicornuta*
    Lateral angles of clypeal process high; insect almost entirely yellowish, *frontata*
13. From the tip of the clypeal process, which is not much elevate, hangs a thin lamella usually divided in the middle 14
    No such lamella present 17

14. Scutellum marked with reddish; only the second tergite banded with yellow; clypeal lamella divided in the middle ..... *flavofasciata*
Scutellum marked with yellow 15
15. Clypeal lamella emarginate in the middle, practically divided; yellowish; enclosure strongly rugose ..... *compacta*
Clypeal lamella not emarginate in the middle 16
16. Propodeum largely yellowish; legs reddish; posterior orbits and two spots on vertex yellow ..... *squamulifera*
Propodeum black; legs black, yellow and red; posterior orbits and vertex black ..... *mandibularis*
17. Scutellum marked with yellow; usually a mark on first tergite 18
Metanotum only with yellow 21
18. Propodeum marked with yellow; second abdominal segment entirely black ..... *intractibilis*
Propodeum not marked with yellow 19
19. Mesepisterna not toothed or ridged; narrow bands on all tergites; clypeal process small; enclosure smooth in middle ..... *compar*
A small tooth or ridge on mesepisterna 20
20. Large species, 12–13 mm.; broad yellow band on the second tergite; rather finely punctate ..... *pleuralis*
Small species, 7–8 mm.; no band on third tergite; no yellow on interantennal ridge; very coarsely punctate ..... *kennicotti*
21. Body very sparsely punctate and shining; clypeus with a low elevation almost coming to a point; femora black ..... *nitida*
Body rather coarsely punctate 22
22. Spot at base of mandibles, usually also on propodeum; markings white; enclosure striate all over; clypeal process emarginate in front, *nigrescens*
No spot at base of mandibles nor on propodeum 23
23. Clypeal process short, narrower at apex than at base; yellow lateral spots on first tergite; rather broad emarginate band on second tergite ..... *arbuscula*
Clypeal process not or but little narrowed in front 24
24. Angles of clypeal process sharply produced; enclosure strongly striate; spots on first abdominal tergite connate ..... *dentifrons*
Clypeal process broad, angles not produced; spots on first tergite almost meeting; second tergite with a broad yellow band, widely and deeply emarginate; remaining tergites with narrow yellow bands; wings black ..... *architis*
25. Wings wholly black; face with three transverse pale spots, metanotum yellow, scutellum immaculate, band only on second tergite; enclosure broad and smooth ..... *fumipennis*
Wings not wholly black 26
26. Second tergite of abdomen immaculate ..... *insolita*
Second tergite of abdomen banded 27

27. Enclosure transversely rugose; stigma dark brown; spots on scutellum and band on metanotum yellow; small coarsely punctate species 28
    Enclosure smooth in part or longitudinally striate; stigma yellowish, first tergite of abdomen with a band 30
28. First segment of abdomen black, usually with yellow mark; band on second tergite usually emarginate in front .....*finitima*
    First segment of abdomen red; band on second tergite usually not emarginate in front 29
29. Propodeum black .....*rufinoda*
    Propodeum reddish (except enclosure) .....*rufinoda crucis*
30. Scutellum, but not metanotum, yellow; clypeus all yellow; band on first tergite; hind femora blackish; enclosure punctate on sides, *catawba*
    Metanotum, but not scutellum, yellow; yellow spot on clypeus; first tergite spotted; hind femora yellowish; enclosure mostly smooth, *fulvipediculata*

Males

1. Hind femora mostly dark, mostly pale, or dark on base 2
   Hind femora pale on base, with a large black spot near apex; rarely spot on scutellum, metanotum yellow 17
2. Scutellum not spotted, but metanotum yellow; enclosure not transversely rugose 3
   Scutellum marked with yellow, or both scutellum and metanotum black, or both yellow 7
3. First abdominal segment red; legs yellowish .....*vicina*
   First abdominal segment black with yellow markings 4
4. Wings black; a large lateral spot on each side of face; scape of antennae black; hind femora and stigma also black .....*fumipennis*
   Wings subhyaline; face all yellow or whitish 5
5. Propodeum marked with yellow; apical segment of abdomen largely yellow .....*fugatrix*
   Propodeum entirely black; apical segment of abdomen black 6
6. Band on second tergite not emarginate, legs 2 and 3 wholly yellow; no tuft of golden hair on last segment .....*gnara*
   Band on second tergite emarginate in front, femora 2 and 3 black on base; apical segment with tuft of dense golden pubescence each side, basal joint of hind tarsi curved .....*venator*
7. Enclosure irregularly transversely rugose; stigma blackish; hind femora mostly black; small, coarsely punctate species 8
   Enclosure more or less smooth, or longitudinally striate 10
8. First segment of abdomen mostly reddish; band on second tergite not emarginate .....*rufinoda*

First segment black, sometimes with a spot or band of yellow 9
9. Face wholly yellow ..... *finitima*
Face with a large black spot each side between clypeus and base of the mandibles ..... *finitima nigroris*
10. No band on the second tergite, which is wholly black; a band on the first tergite; no marks on metanotum ..... *insolita*
A band of yellow on second tergite 11
11. Mesepisterna dentate; antennae situated high above the clypeus, the last joint thick; bands on tergites subequal in width ..... *compar*
Mesepisterna not toothed 12
12. Hind femora black, except at tips; metanotum black; small, coarsely punctate species ..... *kennicotti*
Hind femora mostly pale 13
13. Metanotum black 14
Scutellum and metanotum marked with yellow 15
14. Propodeum without yellow stripes; first tergite immaculate (sometimes both scutellum and metanotum black) ..... *flavofasciata*
Propodeum with yellow stripes; first tergite with a yellow band; bands on tergites subequal in width ..... *femur-rubrum*
15. Large species, 22–25 mm.; red, black and yellow ..... *frontata*
Smaller species, 10–15 mm.; black and yellow 16
16. Propodeum not marked with yellow; stigma dark; clypeus acutely produced below in the middle ..... *compacta*
Propodeum with lateral yellow spots; stigma yellowish; yellow mark on clypeus acuminate below ..... *pleuralis*
17. Clypeus flat, broadly truncate in front; propodeum and first tergite marked with yellow; enclosure striate at the sides.. *occipitomaculata*
Clypeus convex, no transverse impression 18
18. Large species, 13–15 mm.; clypeus truncate apically; first tergite of abdomen spotted; bands on remaining tergites subequal ..... *sexta*
Smaller species, 9–12 mm.; clypeus usually tridentate 19
19. Spots on first tergite; enclosure striate all over; ornaments white; venter with large spots or bands ..... *nigrescens*
Rarely spots on first tergite; enclosure striate all over, last ventral plate furcate at the tip 20
20. Enclosure finely evenly striate; abdomen very slender, first segment narrow; usually but four or five teeth above on hind tibiae, *imitatoria*
Enclosure more coarsely striate; abdomen broader, more coarsely punctate; six to eight teeth above on hind tibiae ..... *clypeata*

Cerceris bicornuta Guerin.

1845. *Cerceris bicornuta* Guerin, *Icon. Reg. Anim.*, p. 443.
1912. *Cerceris bicornuta* Banks, *Ann. Ent. Soc. Amer.*, V, p. 16.

Females 13: Omaha (4), Louisville (4), Lincoln (3) and Mitchell (2); July 21 to September 12; visits flowers of *Melilotus alba, Asclepias syriaca, Asclepias verticillata, Symphoricarpos symphoricarpos, Euphorbia* sp. and *Lactuca pulchella.*

Cerceris venator Cresson.

1865. *Cerceris venator* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 116.
1908. *Cerceris venator* H. S. Smith, Univ. Nebr. Studies, VIII, p. 364.

Males 48: Omaha (10), Louisville (3), South Bend (7), Meadow (2), Lincoln (16), Roca (2), Concord (1), Maskell (2), Culbertson (2) and Mitchell (3); June 24 to September 5; visits flowers of *Asclepias syriaca, Asclepias incarnata, Chamaecrista fasciculata, Melilotus alba, Ceanothus americanus, Petalostemum candidum, Euphorbia marginata* and *Solidago glaberrima.*

Cerceris frontata Say.

1823. *Cerceris frontata* Say, *West. Quart. Rep.*, II, p. 80.
1912. *Cerceris frontata* Banks, *Ann. Ent. Soc. Amer.*, V, p. 16.

Male 1, females 2: Haigler (2), Lincoln (1); August 2 to August 20.

Cerceris fumipennis Say.

1837. *Cerceris fumipennis* Say, *Bost. Journ. Nat. Hist.*, I, p. 381.
1912. *Cerceris fumipennis* Banks, *Ann. Ent. Soc. Amer.*, V, p. 17.

Males 27, females 18: Rulo (4), Child's Point (1), Omaha (11), Louisville (5), South Bend (13), Lincoln (4), Maskell (1), Glen (3), Warbonnet Canyon (1) and Sioux county (1); June 24 to September 12; visits flowers of *Melilotus alba, Asclepias incarnata, Solidago glaberrima, Symphoricarpos symphoricarpos, Amorpha canescens, Ceanothus americanus* and *Cleome serrulata.*

Cerceris mandibularis Patton.

1880. *Cerceris mandibularis* Patton, *Proc. Bost. Soc. Nat. Hist.*, XX, p. 403.
1912. *Cerceris mandibularis* Banks, *Ann. Ent. Soc. Amer.*, V, p. 17.

Females 2: Rulo, June 29, 1915 (E. M. Partridge); Omaha, July 11, 1914 (L. T. Williams).

Cerceris compacta Cresson.

1865. *Cerceris compacta* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 127.
1912. *Cerceris compacta* Banks, *Ann. Ent. Soc. Amer.*, V, p. 17.

Males 3, females 2: Omaha (3), Lincoln (1) and Bridgeport (1); June 17 to August 13; visits flowers of *Melilotus alba, Chamaecrista fasciculata* and *Asclepias incarnata.*

Cerceris flavofasciata H. S. Smith.

1908. *Cerceris flavofasciata* H. S. Smith, Univ. Nebr. Studies, VIII, p. 364.

Males 9, females 5: Rulo (1), Child's Point (2), Omaha (1), South Bend (7), Lincoln (1), Maskell (1) and Monroe Canyon (1); June 30 to August 20; visits flowers of *Melilotus alba, Ceanothus americanus* and *Amorpha canescens.*

Cerceris dentifrons Cresson.

1865. *Cerceris dentifrons* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 124.
1912. *Cerceris dentifrons* Banks, *Ann. Ent. Soc. Amer.*, V, p. 18.

Females 1: South Sioux City, August 3, 1912 (L. T. Williams).

Cerceris clypeata Dahlbom.

1845. *Cerceris clypeata* Dahlbom, *Hymen. Eur.*, I, pp. 221 and 500.
1865. *Cerceris clypeata* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 114.
1912. *Cerceris clypeata* Banks, *Ann. Ent. Soc. Amer.*, V, p. 18.

Males 51, females 9: Rulo (2), Child's Point (3), Omaha (29), Louisville (1), South Bend (4), Meadow (1), Lincoln (7), Tekamah (1), West Point (2), South Sioux City (2), Maskell (1), Glen (4) and Warbonnet Canyon (1); June 26 to August 25; visits flowers of *Melilotus alba, Chamaecrista fasciculata, Solidago canadensis, Teucrium canadense* and *Medicago sativa.*

I have not restricted this species more than Cresson or Packard. *Clypeata* as designated by Banks has not been taken in the state. Practically all the female specimens at hand have the yellow band on the second segment emarginate in front; two or three have small yellow spots on the first segment; one or two have small yellow spots on the metanotum; two or three have the enclosed space on the metanotum mostly granulate, others have it more or less striated; the projection of the clypeus varies from about as long as broad, to very much longer than broad. All

this variation occurs in nine specimens with no two alike. One of these might possibly be placed as *dakotensis* Banks. The males also vary considerably in the distribution of yellow on the first abdominal segment and metanotum, and to some extent in the sculpture of the enclosed space. However, in this series of 51 males there does not seem to be any constant variation or any structural character by which they might be grouped and correlated with the females. Further collecting and study may show these to be distinct species, but from the material at hand it would appear that this is a wide ranging and quite variable species.

Cerceris deserta Say.

1824. *Cerceris deserta* Say, *Long's Exped.*, II, App., p. 344.
1912. *Cerceris deserta* Banks, *Ann. Ent. Soc. Amer.*, V, p. 18.

Males 1: Mitchell, September 5, 1916 (R. W. Dawson).

Cerceris gnara Cresson.

1872. *Cerceris gnara* Cresson, *Trans. Amer. Ent. Soc.*, IV, p. 229.
1912. *Cerceris gnara* Banks, *Ann. Ent. Eoc. Amer.*, V, p. 22.

Males 19, females 24: Rulo (2), South Bend (5), Curtis (1), Bridgeport (2), Mitchell (32) and Monroe Canyon (1); June 23 to August 7; visits flowers of *Melilotus alba* and *Ceanothus americanus*.

Cerceris alceste Mickel.

1918. *Cerceris alceste* Mickel, Univ. Nebr. Studies, XVII, p. 333.

Female 1: Mitchell, August 24, 1916 (C. E. Mickel).

Cerceris occipitomaculata Packard.

1866. *Cerceris occipitomaculata* Packard, *Proc. Ent. Soc. Phil.*, VI, p. 62.
1908. *Cerceris occipitomaculata* H. S. Smith, Univ. Nebr. Studies, VIII, p. 368.

Males 13: Omaha (7), Lincoln (3), Fairmont (1) and Glen (1); August 9 to September 14; visits flowers of *Solidago canadensis*.

Cerceris imitatoria Schletterer.

1865. *Cerceris imitator* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 125 (nec. F. Smith).

1887. *Cerceris imitatoria* Schletterer, *Zoologische Jahrbucher;* II, p. 494.
1908. *Cerceris imitatoria* H. S. Smith, Univ. Nebr. Studies, VIII, p. 367.
1912. *Cerceris imitatoria* Banks, *Ann. Ent. Soc. Amer.,* V, p. 20.

Males 7, females 1: Rulo (1), Omaha (1), South Bend (1), Lincoln (1), West Point (1) and Sioux county (2); June 17 to August; visits flowers of *Ceanothus americanus.*

Cerceris nigrescens F. Smith.

1856. *Cerceris nigrescens* F. Smith, *Cat. Hym. Brit. Mus.,* IV, p. 466.
1912. *Cerceris nigrescens* Banks, *Ann. Ent. Soc. Amer.,* V, p. 20.

Males 2, females 2: West Point (2), Mitchell (2); June to July 20; visits flowers of *Cirsium* sp.

Cerceris sexta Say.

1837. *Cerceris sexta* Say, *Bost. Journ. Nat. Hist.,* I, Pt. 4, p. 382.
1865. *Cerceris Sexta* Cresson, *Proc. Ent. Soc. Phil.,* V, p. 119.

Males 1: West Point.

Cerceris architis Mickel.

1916. *Cerceris architis* Mickel, *Trans. Amer. Ent. Soc.,* XLII, p. 409.

Females 1: South Bend, July 2, 1915 (E. G. Anderson); on *Melilotus alba.*

Cerceris arbuscula Mickel.

1916. *Cerceris arbuscula* Mickel, *Trans. Amer. Ent. Soc.,* XLII, p. 410.

Females 1: Omaha, July 23, 1913 (L. T. Williams).

Cerceris vicina Cresson.

1865. *Cerceris vicina* Cresson, *Proc. Ent. Soc. Phil.,* V, p. 120.
1908. *Cerceris vicina* H. S. Smith, Univ. Nebr. Studies, VIII, p. 367.

Males 10, females 11: Mitchell (17), Glen (3) and Bad Lands (1); July 13 to August 15; visits flowers of *Medicago sativa, Melilotus alba, Helianthus* sp., and *Petalostemum* sp.

Cerceris conifrons Mickel.

1916. *Cerceris conifrons* Mickel, *Trans. Amer. Ent. Soc.,* XLII, p. 410.

Females 6: Neligh (1), Mitchell (2), Glen (1) and Harrison (2); August; visits flowers of *Helianthus* sp. and *Melilotus alba.*

Cerceris nebrascensis H. S. Smith.

1908. *Cerceris nebrascensis* H. S. Smith, Univ. Nebr. Studies, VIII, p. 368.

Females 2: Glen (2); August 12 to 15 (P. R. Jones).

Cerceris insolita Cresson.

1865. *Cerceris insolita* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 129.
1908. *Cerceris insolita* H. S. Smith, Univ. Nebr. Studies, VIII, p. 370.
1912. *Cerceris insolita* Banks, *Ann. Ent. Soc. Amer.*, V, p. 23.

Males 26, females 4: Omaha (24), Meadow (1), West Point (1), South Sioux City (1), Carns (1), Mitchell (1) and Glen (2); June 28 to August 25; visits flowers of *Melilotus alba, Chamaecrista fasciculata, Solidago canadensis, Asclepias* sp. and *Cleome serrulata.*

Cerceris intractibilis Mickel.

1916. *Cerceris intractibilis* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 411.

Females 1: Child's Point, July 14, 1915 (E. M. Partridge).

Cerceris femur-rubrum Viereck and Cockerell.

1904. *Cerceris femur-rubrum* Viereck and Cockerell, *Journ. New York Ent. Soc.*, XII, p. 135.

Males 5: Glen (1), Bridgeport (4); July 11 to August 13; visits flowers of *Cleome serrulata.*

Cerceris squamulifera Mickel.

1916. *Cerceris squamulifera* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 411.

Females 2: Imperial, July 2, 1911 (J. T. Zimmer), and Bridgeport, July 11, 1917 (C. E. Mickel).

Cerceris fulvipediculata Schletterer.

1865. *Cerceris fulvipes* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 126 (nec Eversman).
1887. *Cerceris fulvipediculata* Schletterer, *Zoologische Jahrbucher*, II, p. 492.
1912. *Cerceris fulvipedunculata* Banks, *Ann. Ent. Soc. Amer.*, V, p. 24.

Females 6: Omaha (1), Lincoln (4) and Glen (1); August and September; visits flowers of *Chamaecrista* sp.

Cerceris fugatrix Mickel.

1918. *Cerceris fugatrix* Mickel, Univ. Nebr. Studies, XVII, p. 335.

Males 1: Mitchell, August 4, 1916 (C. E. Mickel).

Cerceris alacris Mickel.

1918. *Cerceris alacris* Mickel, Univ. Nebr. Studies, XVII, p. 334.

Females 2: Mitchell, July 20 and 21, 1916 (C. E. Mickel).

Cerceris compar Cresson.

1865. *Cerceris compar* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 126.
1912. *Cerceris compar* Banks, *Ann. Ent. Soc. Amer.*, V, p. 25.

Males 33, females 25: Rulo (1), Child's Point (2), Omaha (9), South Bend (2), Lincoln (2), Red Cloud (1), West Point (37), Emerson (1), South Sioux City (2) and Sioux county (1); June 17 to July 20; visits flowers of *Melilotus alba, Psoralea* sp. and *Ceanothus americanus*.

Cerceris pleuralis H. S. Smith.

1908. *Cerceris pleuralis* H. S. Smith, Univ. Nebr. Studies, VIII, p. 366.

Males 3, females 3: Omaha (1), South Bend (1), Lincoln (1), Rock county (1) and Glen (1); July 2 to August 19; visits flowers of *Helianthus* sp., *Chamaecrista fasciculata* and *Melilotus alba*.

The specimens from Omaha and South Bend have been taken since the species was described.

Cerceris kennicotti Cresson.

1865. *Cerceris kennicotti* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 128.
1912. *Cerceris kennicotti* Banks, *Ann. Ent. Soc. Amer.*, V, p. 25.

Males 25, females 21: Omaha (43), South Bend (1), Lincoln (1) and Neligh (1); July 14 to August 25; visits flowers of *Chamaecrista fasciculata, Asclepias syriaca, Asclepias* sp., *Solidago canadensis* and *Melilotus alba*.

Cerceris catawba Banks.

1912. *Cerceris catawba* Banks, *Ann. Ent. Soc. Amer.*, V, p. 25.

Females 1: Weeping Water, July 20, on *Petalostemum* sp.

Cerceris rufinoda Cresson.

1865. *Cerceris rufinoda* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 121.
1912. *Cerceris rufinoda* Banks, *Ann. Ent. Soc. Amer.*, V, p. 26.

Males 102, females 15: Omaha (5), Beatrice (1), Lincoln (6), Red Cloud (1), Culbertson (1), Carns (1), Brown county (1), Haigler (1), Mitchell (73), Gering (1), Crawford (2), Harrison (17), Glen (4) and Monroe Canyon (1); June 18 to August 26; visits flowers of *Melilotus alba, Chamaecrista fasciculata, Helianthus* sp., *Cleome serrulata, Euphorbia marginata* and *Mentzelia* sp.

Cerceris rufinoda crucis Viereck and Cockerell.

1904. *Cerceris rufinoda crucis* Viereck and Cockerell, *Journ. New York Ent. Soc.*, XII, p. 139.
1912. *Cerceris rufinoda crucis* Banks, *Ann. Ent. Soc. Amer.*, V, p. 26.

Females 2: Omaha (1) and Monroe Canyon (1); August 7 and 14; visits flowers of *Chamaecrista* sp.

Cerceris argia Mickel.

1916. *Cerceris argia* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 412.

Females 1: Lincoln, August 5, 1904, on *Solidago* sp.

Cerceris echo Mickel.

1916. *Cerceris echo* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 412.

Females 41: Omaha (4), Curtis (1), Mitchell (21), Glen (4), Harrison (8) and Monroe Canyon (2); July 13 to August 29; visits flowers of *Melilotus alba, Chamaecrista fasciculata, Cleome serrulata, Solidago* sp. and *Helianthus* sp.

Cerceris finitima Cresson.

1865. *Cerceris finitima* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 122.
1912. *Cerceris finitima* Banks, *Ann. Ent. Soc. Amer.*, V, p. 27.

Males 38, females 28: Rulo (1), Omaha (11), Lincoln (8), West Point (5), South Sioux City (2), Neligh (1), Ogallala (1), Bridgeport (2), Mitchell (13), Harrison (13), Glen (9) and Monroe Canyon (1); June 17 to August 31; visits flowers of *Chamaecrista* sp., *Solidago canadensis, Melilotus alba, Asclepias* sp., *Euphorbia* sp. and *Cleome serrulata.*

Cerceris finitima nigroris Banks.

1912. *Cerceris finitima nigroris* Banks, *Ann. Ent. Soc. Amer.*, V, p. 27.

Males 12: Omaha (2), Haigler (1), Bridgeport (2), Mitchell (3) and Harrison (4); July 8 to August 25; visits flowers of

Chamaecrista fasciculata, Helianthus sp. and *Solidago canadensis.*

Cerceris nitida Banks.

1913. *Cerceris nitida* Banks, *Bull. Amer. Nat. Hist.*, XXXII, p. 424.

Females 1: Rulo, June 30, 1915 (L. Bruner).

Eucerceris Cresson

KEY TO THE SPECIES

Females

1. Middle or lateral lobes of clypeus produced, forming a tooth or cone 2
   Lobes of clypeus not produced, flat or slightly convex 6
2. Lateral lobes of clypeus produced, forming a stout tooth on each lobe perpendicular to the surface, body largely yellow .....*canaliculata*
   Only the middle lobe of clypeus produced; body largely black and red, or black, red and yellow 3
3. Abdomen without yellow markings, first three abdominal segments more or less ferruginous, three apical segments black .....*bicolor*
   Abdomen with yellow markings 4
4. Tergites finely and closely punctured; enclosure of propodeum strongly rugose; ground color of body varies from black to ferruginous, *zonata*
   Tergites sparsely punctured; enclosure of propodeum smooth, or more or less transversely and obliquely striate 5
5. Sternites not marked with yellow; scutellum black; clypeus toothed at the apex, with a broad process between the teeth .....*rubripes*
   Third and fourth sternites with yellow bands (sometimes interrupted); scutellum yellow; apex of clypeus toothed but no process between the teeth .....*elegans*
6. Enclosure of propodeum shining, transversely striate; middle lobe of clypeus convex, toothed at apex; body coarsely but not densely punctured .....*fulvipes*
   Enclosure of propodeum opaque, punctate; middle lobe of clypeus flat, produced at apex; body finely and densely punctured .....*montana*

Males

1. Second cubital cell petiolate .....*montana*
   Second cubital cell not petiolate 2
2. Thorax largely yellow and ferruginous; sternites three and four with a fringe of long, erect, curved bristles on the apical middle, and a row of short, erect, closely appressed bristles on apical middle of sternite five .....*canaliculata*

Thorax largely black, marked with more or less yellow 3

3. Enclosure of propodeum strongly rugose; sternites three, four and five with two short rows of erect, curved bristles on the apical middle, *zonata*

Enclosure of propodeum more or less transversely or obliquely striate 4

4. Sternites three, four and five with a fringe of long, erect curved bristles on the apical middle; size large, 15–18 mm. .....*superba*

Either sternite five, or sternites three and four without a fringe of bristles; size smaller, 11–14 mm. 5

5. Sternites three and four each with a fringe of long, erect bristles on the apical middle; sternite five with dentiform processes on the apical middle; enclosure of propodeum more or less obliquely striate .....*elegans*

Sternites three and four without a fringe of long, erect bristles; enclosure of propodeum more or less transversely striate 6

6. Venter of thorax black; hind coxae ferruginous or blackish...*rubripes*

Venter of thorax marked with whitish; hind coxae largely whitish, *fulvipes*

Eucerceris canaliculata (Say).

1823. *Philanthus canaliculatus* Say, *West. Quart. Rep.*, II, p. 80.
1823. *Cerceris bidentata* Say, *West. Quart. Rep.*, II, p. 80.
1882. *Eucerceris canaliculatus* Cresson, *Trans. Amer. Ent. Soc.*, X, Proc., p. vii.

Males 3, females 2: Lincoln (1), Haigler (1), Mitchell (1) and Bad Lands (2); July and August; visits flowers of *Melilotus alba.*

Eucerceris bicolor Cresson.

1881. *Eucerceris bicolor* Cresson, *Trans. Amer. Ent. Soc.*, IX, Proc., p. xxxviii.
1882. *Eucerceris bicolor* Cresson, *Trans. Amer. Ent. Soc.*, X, Proc., p. vii.

Females 4: Benkelman (1), Mitchell (1) and Glen (2); July and August.

Eucerceris rubripes Cresson.

1879. *Eucerceris rubripes* Cresson, *Trans. Amer. Ent. Soc.*, VII, Proc., p. xxiii.
1882. *Eucerceris rubripes* Cresson, *Trans. Amer. Ent. Soc.*, X, Proc., p. vii.

Males 35, females 7: Lincoln (1), West Point (3), Maskell (3), Curtis (6), Gordon (2), Glen (21) and Monroe Canyon

(6); June 24 to August 27; visits flowers of *Melilotus alba* and *Solidago* sp.

Eucerceris zonata (Say).

1823. *Philanthus zonata* Say, *West. Quart. Rep.*, II, p. 79.
1865. *Eucerceris laticeps* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 107.
1882. *Eucerceris zonatus* Cresson, *Trans. Amer. Ent. Soc.*, X, Proc., p. vii.

Males 13, females 10: Child's Point (1), Omaha (4), Louisville (1), Lincoln (12), Niobrara (1) and Glen (4); July 31 to September 14; visits flowers of *Aster multiflorus, Vernonia fasciculata, Euphorbia* sp. and *Petalostemum violaceus.*

Eucerceris fulvipes Cresson.

1865. *Eucerceris fulvipes* Cresson, *Proc. Ent. Soc. Phil.*, V, p. iii.
1882. *Eucerceris fulvipes* Cresson, *Trans. Amer. Ent. Soc.*, X, Proc., p. vii.

Males 59, females 4: Crawford (1), Harrison (8), Glen (46), Monroe Canyon (5), Bad Lands (2) and Warbonnet Canyon (1); July 13 to September 15; visits flowers of *Helianthus* sp., *Solidago* sp., *Melilotus* sp. and *Cleome serrulata.*

Eucerceris superba Cresson.

1865. *Eucerceris superba* Cresson, *Proc. Ent. Soc. Phil.*, V, p. 108.
1882. *Eucerceris superba* Cresson, *Trans. Amer. Ent. Soc.*, X, Proc., p. vii.

Males 5: Glen (4) and Monroe Canyon (1); August.

Eucerceris elegans Cresson.

1879. *Eucerceris elegans* Cresson, *Trans. Amer. Ent. Soc.*, VII, Proc., p. xxiii.
1882. *Eucerceris elegans* Cresson, *Trans. Amer. Ent. Soc.*, X, Proc., p. vii.
1916. *Eucerceris elegans* Mickel, *Trans. Amer. Ent. Soc.*, XLII, p. 413.

Males 3, females 2: Halsey (4), Bridgeport (1); July 11 to August 29.

Eucerceris montana Cresson.

1882. *Eucerceris montana* Cresson, *Trans. Amer. Ent. Soc.*, X, Proc., p. viii.

Females 1: Haigler, July 7, 1911 (J. T. Zimmer).

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